The Snohomish River Basin

Building a Healthy Watershed

Snohomish Basin
Salmon Recovery Forum

Snoqualmie ~ Watershed
Forum

Introduction

Overview of the Snohomish Basin 10-Year Conservation Plan and 3-Year Work Planning

The *Snohomish River Basin Salmon Conservation Plan* (2005) is a multi-salmonid strategy that emphasizes two Endangered Species Act (ESA) listed species, Chinook salmon and bull trout char, as well as non-listed coho, all of which are used as proxies for other salmonids in the Basin. The *Plan*, developed by the 41-member Snohomish Basin Salmon Recovery Forum (the Forum), incorporates actions across habitat, harvest and hatchery management to bring the listed wild stocks back to healthy, harvestable levels.

The Snohomish River Basin 3-year Work Plan update is a combination of documents that provides direction and a technical foundation for salmon recovery in the Basin. This work is outlined for the next 3 years and derives from the 10-year *Snohomish River Basin Salmon Conservation Plan* (2005). Included in the 2009 3-year Work Plan update are: a narrative, a spreadsheet containing all of the capital, programmatic, harvest and hatchery actions that outline our strategy for the next three years of the recovery process, and a map showing the locations of habitat restoration projects in the Basin.

The Puget Sound Partnership has established the following 3-Year work plan goals:

1. To provide a forum for watershed groups, the Recovery Implementation Technical Team (RITT), and Puget Sound Partnership (PSP) staff to discuss the work, status, and needs of salmon recovery in each salmon recovery watershed chapter and regionally;
2. To have a tool that documents the work, status, and needs of salmon recovery per each salmon recovery watershed chapter for the next three years that can be rolled up into a regional statement of the funding and capacity needs, current status, and existing work underway;
3. To be a tool for identifying priority projects for current and future funding opportunities;
4. To document changes in the implementation of each salmon recovery watershed chapter.

These goals will be addressed through using the work plan to create clear linkages between Plan Strategies / benchmarks and implementation progress in order to identify priorities actions and highlight these actions on our work list.

Snohomish Basin uses the 3-Year Work Plan to meet these goals:

1. Run an inclusive work planning process that is representative of the diversity of work being conducted throughout the basin.
2. Utilize the work plan as a communication tool for :
    - Project and program sponsors
    - Basin staff
    - Technical and Policy Development Committees
    - The Snohomish Basin Forum

The Snohomish River Basin Three-Year Work Program identifies work planned over a 3-year period to advance salmon recovery through habitat protection, restoration, hatchery operations, harvest management, and integration of multi-H activities. For 2010, the total list of projects reflects actions being taken by project sponsors throughout the basin as well as projects that could take place given different funding levels, the opportunistic nature of restoration, and recommendations from the *Plan*. The project list is largely self-selected by project sponsors, based on landowner willingness, match and other readiness criteria. This list therefore represents a comprehensive list of actions project sponsors are actively working to advance. These actions are informed by recommended specific sequencing laid out in the ten-year *Plan*, but are not to be considered a definitive list of projects that will absolutely take place over the next three years.

All projects in the work program are consistent with the priorities laid out in the *Plan*. In addition to capital projects, the work program highlights protection measures, harvest, hatchery, and h-integration needs in the basin. The narrative is structured by the questions posed by the Puget Sound Partnership and Recovery Implementation Technical Team:

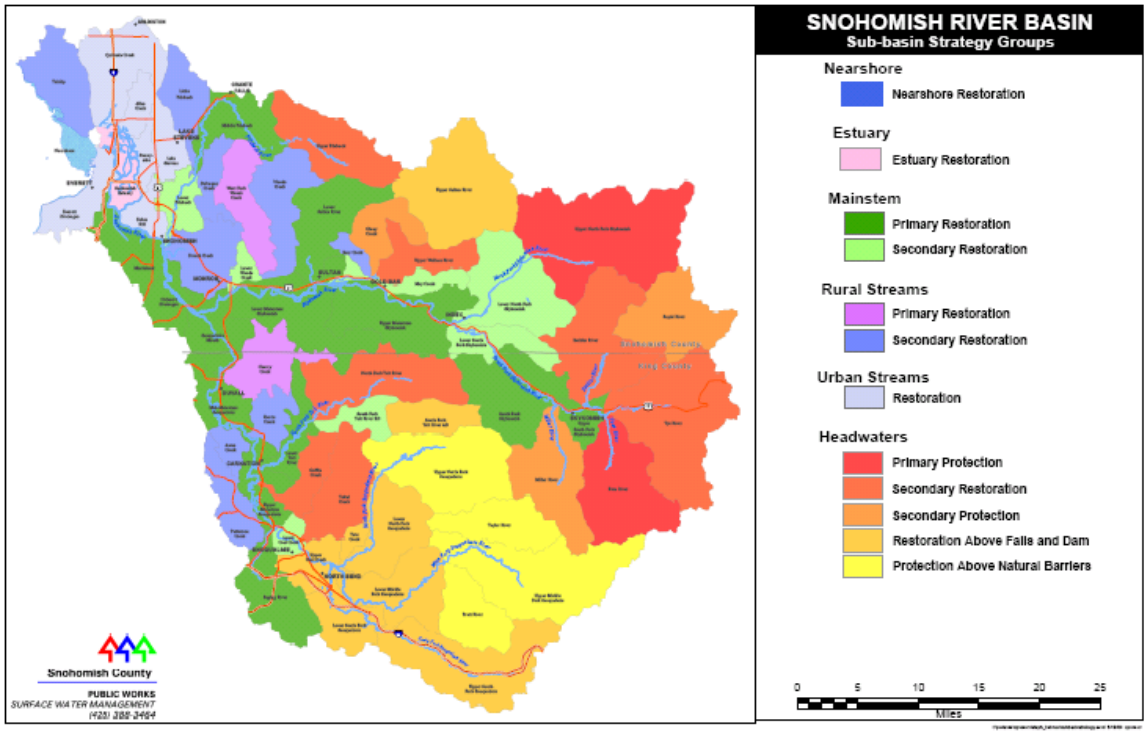
- Consistency – we provide framework for habitat, hatchery, and harvest developed by the Snohomish River Basin Conservation Plan (2005) and discuss work proposed under this 3-year work plan
- Pace/Status – we identify 10-year benchmarks developed in the Snohomish River Basin Conservation Plan (2005), evaluate progress toward those benchmarks, and link this information to a prioritization scheme
- Sequence/Timing – we provide a general discussion of prioritization, sequencing, and timing considerations
- The Next Big Challenge – we highlight any changes in approach or new implementation challenges

Strategy, Progress, Priorities, and Anticipated 3-Year Outcomes

Consistency Question: *What are the actions and/or suites of actions needed for the next three years to implement your salmon recovery chapter as part of the regional recovery effort?*

Habitat Overview: Sub-basin Strategy Groups Identify Protection and Restoration Priority Areas

As part of the development of the habitat strategic framework in the Snohomish River Basin Conservation Plan, each of 62 sub-basins and nearshore areas was assigned to one of twelve Sub-basin Strategy Groups (SBSG). Each SBSG is characterized by three main factors: basin location (geomorphic, land-use, role in supporting salmon life history stage), condition of watershed processes (hydrology, sediment, and riparian), and current and potential salmonid use (Appendix A). Through the use of SBSGs, the conservation plan tailors the recovery strategy through the identification and prioritization of specific preservation and restoration actions at the Sub-basin Strategy Group level.



Habitat Protection

Framework: In order to achieve a net gain of salmon habitat, restoration actions must be coupled with the protection and preservation of existing functional habitat. Protection actions to preserve high priority habitat and watershed function are given the highest priority within every Sub-basin Strategy Group (Appendix B). While much of the land in WRIA 7 is forested and held by state (12.1%) and federal governments (37.6%), private forestry remains a significant land use. Some areas are subject to active logging and associated activities, such as road-building, while others are within protected wilderness areas. Thus, development risk (and resulting impairment to basin hydrology and increases in impervious area) is considered to be a lower risk in these areas. While forest protection is important, the Plan's protection efforts are largely focused on the remaining portions of the basin where further land conversion and habitat degradation are likely, primarily within unincorporated King and Snohomish counties. Incorporated areas also have a role to play habitat protection.

Summarized 3-Year Outcomes: Habitat protection progress will greatly be advanced by EPA Puget Sound Watershed Management Assistance funds Snohomish Basin partners (Snohomish County, Tulalip Tribes, and King County) recently received (Project ID 07-NC-014). This 4-year grant will enable the basin to develop a protection strategy to address the challenges of development and climate change. At the end of a three-year time period, the watershed characterization and reach-scale process analysis will have been conducted within protection priority sub-basins. This groundwork will facilitate subsequent work covered by the grant, developing a strategic, actionable habitat protection plan and implementing early action plan elements. The Snohomish Basin is also working to establish cumulative effectiveness elements in the basin-wide monitoring plan. This monitoring will provide a systematic evaluation of habitat change, capturing both habitat improvements and degradation, throughout the basin.

In advance of a more developed protection strategy and information about habitat change, several habitat protection projects are included in the 3-year work program project list, illustrating the need for early action to advance protection efforts. These projects include the development of an acquisition strategy along the nearshore, acquisitions along priority reaches of mainstem rivers to protect intact juvenile rearing habitat, and acquisitions in the rural and headwater areas aimed at protecting hydrologic and sediment watershed processes (all identified as Tier 1 actions in the Plan). Additional non-capital efforts encourage best management practice implementation and land-use specific stewardship, and outreach for general environmental awareness. Shoreline Master Program updates are in progress or planned for many Snohomish Basin jurisdictions during this work plan period, providing an opportunity for improved land use planning with implications for salmon recovery. At a larger scale, the NOAA biological opinion on the FEMA flood insurance program has implications for floodplain development and associated protection issues.

Funding: Funding requirements for habitat protection are difficult to summarize. Funds for acquisition are the most straight forward to calculate, but only capture one approach out of many needed for protection. Costs for other tools often associated with personnel costs to provide technical assistance, conduct landowner outreach, and interface on policy issues. Given that investments made in habitat protection have broad societal benefits and costs, it is

necessary to more rigorously evaluate funding mechanisms and formulate a funding strategy. Ecosystem Services Evaluations conducted broadly for the Snohomish Basin and more focused in the Snoqualmie basin are a first step in this process.

Changes between 2009 and 2010: This work plan better reflects the primary importance of habitat protection identified in the work plan and sequencing issues related to habitat protection and restoration. With the funding of Puget Sound Watershed Management Assistance Funds and current efforts to investigate market-based mechanisms for protection, we anticipate that future work plans will be more strategic and directive in identifying protection needs and linking goals to available tools.

Habitat Restoration

Framework: The loss of rearing habitat quantity and quality along the mainstem rivers, estuary and nearshore is thought to be the primary habitat factor in the decline of Snohomish Basin Chinook salmon. In other words, the basin is thought to contain sufficient high-quality spawning habitat to support recovery, but subsequent juvenile production is thought to be severely limited by the disconnection of floodplain and estuarine habitats and degradation of nearshore habitat. The Plan calls for actions focused on restoring and preserving watershed processes across the basin, with special emphasis on rearing habitat improvements in these high-priority environments. For the first decade of Plan implementation, a generalized allocation of resources between the strategy groups includes:

- 80% of basin-wide capital project resources should be directed toward restoration and protection efforts in the Nearshore, Estuary, and Mainstem Sub-basin Strategy Groups.
- 15% of basin-wide capital project resources should be funded toward restoration and protection efforts in lowland tributaries.
- 5% effort should be directed toward effort in headwater areas.

The 10-year target allocation is based primarily on ecological prioritization, but also reflects practical and political considerations.

Summarized 3-Year Outcomes:

- In the Nearshore SBSG, planned assessments to direct beach restoration and habitat protection will ensure that protection and restoration moves forward in a coordinated fashion and that these efforts are directed at high priority projects.
- In the Estuary SBSG, project sponsors continue to advance multiple large tidal marsh projects and planned work indicates the tidal marsh acreage needed to meet 10-year benchmarks may be under construction by 2015. These large restoration projects are funded in part by mitigation dollars, underscoring the need to determine how mitigation gains will be counted. This work plan also contains an important stakeholder process and technical assessment of the WDFW holdings on Ebey Island that together will lead to a land management plan.
- Several large scale Mainstem Primary SBSG restoration projects are moving forward. Project sponsors are achieving good spatial distribution of these projects, as work is being advanced in the Lower Snohomish, Pilchuck, Snoqualmie, Skykomish, and Tolt rivers. Despite this effort, it is not clear if we will

be on track to meet 10-year benchmarks at the end of the 3 year period covered by the work plan. The proposed work plan contains several different projects in different implementation phases, which is key to ensure that projects are continuously ready for construction. While we are currently on pace to meet riparian benchmarks based on project implementation data, little is known about riparian loss since the adoption of the plan, and it is important that we continue to maintain a good pace with riparian restoration and related stewardship efforts.

- The Mainstem Secondary SBSG is not well represented by the project list, which is congruent with the prioritization established in the plan and reflects the reality of resources to advance lower priority projects.
- Increasingly, work in Rural SBSG is coordinated among multiple basin partners and assessments direct restoration priorities. In the Rural Primary Subbasin Strategy Group, the West Fork Woods Creek Subbasin assessment will direct actions by a number of project sponsors. Work in Cherry Creek also has a long history of collaborative and sustained effort. While many riparian and fish passage opportunities are identified in this work plan, opportunities for restoring side-channel habitat are lacking.
- In the Urban Subbasin Strategy group, efforts directed towards the Allen Creek Subbasin are of particular interest in this work plan. Door to door outreach to engage landowners in best management practices to protect water quality and riparian habitat restoration is complementary to the restored fish passage element of the Qwuloolt tidal marsh project. The Allen-Quilceda Watershed Team (AQWA Team) continues to provide a key function coordination restoration and outreach actions among partners working in this urban area.

Funding: Identified 3-year funding needs are about $63 Million, exceeding the Forum annual funding goal of $15 – $17M per year. The anticipated allocation of cost between Subbasin strategy groups is aligned with the generalized allocation of resources recommended in the plan. While anticipated funding needs generally correspond with both overall funding targets and allocation splits, it is important to highlight that past analysis of restoration funding has identified that we have been implementing the habitat part of the Plan at a rate of 34% per year. As is expected given the past funding deficit, implementation monitoring (p. 12) confirms that we are not on pace to meet our benchmarks. Even assuming no net loss in habitat function, we will need to increase the rate of implementation significantly to meet our 10 year-benchmarks. If mitigation funds are included in the 2009 revenue picture, we met the Forum's $15M/year goal for funding, illustrating that the Forum's goal is obtainable. However, the current backlog of project work stands at ~$40M and it is unlikely that we will be able to address this deficit with the proposed work plan.

Changes between 2009 and 2010: The most significant change in how the work plan was developed is the application of implementation results to inform prioritization and sequencing in the 2010 work plan (see Sequence / Timing Section below). Thirteen projects representing approximately $10 Million worth of worth have moved off the project list since last year. Six of these 13 projects moved off the list because they were completed in the past year, though this number underestimates the amount of work accomplished last year, because many projects remain on this list due to maintenance needs. Additional reasons for removal included: need for further prioritization (4), project is being addressed under a different project (1), change in sponsor priorities (1) and no reason identified (1). Thirteen new habitat capital projects were added to the work plan in 2010. These additions included 2 projects that address Tier 1 actions that are currently behind pace to meet 10-year benchmarks: Everett Riverfront North Wetland Complex and Everett Marshland

Tidal Wetland Restoration. Also added were 6 projects that address Tier 1 actions currently on pace to meet benchmarks (mainstem primary riparian restoration and fish passage blockages), and 1 urban restoration project that addresses our shortfalls in our 10-year riparian restoration benchmark.

Harvest Management

Framework: Snohomish Chinook are harvested as part of large, mixed-stock fisheries from southeast Alaska to north Puget Sound and as bycatch in Puget Sound fisheries directed at harvestable hatchery Chinook and other salmon species. Harvest rates have declined more or less steadily since the inception of the Pacific Salmon Treaty in the mid-1980s and especially beginning in the mid-1990s just before the ESA-listing of Puget Sound Chinook salmon in 1998. The role of fishery management in the Plan is based on the premise that harvest can be limited to a rate that will not impede recovery, as long as other actions (habitat protection, habitat restoration, and hatchery management) are also implemented to promote recovery. The current harvest plan[1] assumes that sustained annual harvest rates below 21% (as measured by the FRAM[2] model) will enable the Snohomish Chinook populations to increase in abundance and productivity consistent with the quantity and quality of habitat available throughout their life cycle. The Plan also hypothesizes that this exploitation rate is low enough to improve spatial distribution, life history diversity, and better represent a natural distribution of age classes in the population.

Summarized 3-Year Outcomes: The most important outcome for the next three years is to achieve both the preseason planned, and the postseason realized, overall exploitation rates below the 0.21 (as measured by FRAM) guideline. This should be easier to reach with reduced Canadian and Alaskan interceptions due to the new Pacific Salmon Treaty annex (see below). In the next year, we should have completed sample collections and genetic analyses necessary to include both the Skykomish and Snoqualmie populations in the DNA baseline for coast-wide stock composition analysis of Chinook salmon fisheries. However, this information will not be usable in management unless a coast-wide genetic sampling and analysis program is funded and implemented.

Funding: The work necessary for planning and managing fisheries according to the harvest management plan is funded through federal, state, and tribal fishery management programs. Coded-wire tagging, tag recovery, laboratory processing of tags, and database maintenance are funded mainly through federal funds made available to state and tribal fishery managers for this purpose. Analysis of stock composition and exploitation rates is funded through Pacific Salmon Commission implementation funds and by state and tribal comanagers in the domestic management process. These are mainly region- or coast-wide programs, and it is difficult to separate the portion of these funds that would be spent to manage Snohomish Chinook. Determination of

[1] Guidelines for overall harvest impacts on Snohomish Chinook are included in the *Comprehensive Management Plan for Puget Sound Chinook: Harvest Management Component*, 2005. An updated plan was submitted to NOAA Fisheries for review under the 4(d) rule in late 2009.

[2] The Fishery Regulation Assessment Model is used by state and tribal comanagers and the Pacific Fishery Management Council annually to evaluate the cumulative effects of all harvest-related mortality on west coast Chinook and coho salmon stocks.

separate exploitation rates for the Skykomish and Snoqualmie populations, and subsequent development of separate rebuilding exploitation rates for these, is dependent on funding and implementing a coordinated, coast-wide genetic sampling and data analysis program for Chinook fisheries.

Changes between 2009 and 2010: In 2009, the United States and Canada began implementing a new Chinook annex to the Pacific Salmon Treaty that included a 15% reduction in mixed-stock fisheries in southeast Alaska and a 30% reduction in mixed-stock fisheries off the west coast of Vancouver Island. Initial indications are that these changes are resulting in some reduction in overall exploitation rates on Snohomish Chinook. In early 2010, the comanagers submitted a new harvest management plan covering the years 2010-2014, which is now being reviewed by NOAA Fisheries. The Snohomish portion of this plan will continue the current harvest management guidelines for fisheries south of the US/Canada border.

Hatchery Management

Framework: The State of Washington and the Tulalip Tribes operate hatchery programs in the Snohomish basin to provide harvest opportunity with minimal effect on natural origin fish. The Plan assumes that these hatcheries can be managed in a way that will not impede recovery, assuming other actions to promote recovery (habitat protection, habitat restoration, and harvest management) are implemented. Hatchery management strategies include: increasing the genetic similarity of the Skykomish hatchery stocks and the Skykomish natural population via integrated broodstock management; evaluating possible negative ecological interactions between hatchery- fish and natural-origin fish; addressing migration delays or blockages for natural-origin fish due to hatchery weirs, and targeting hatchery-origin fish in fisheries. The implementation plan for these strategies is the subject of a 2005 state-tribal Hatchery Memorandum of Understanding (MOU) Agreement between the Washington Department of Wildlife and the Tulalip Tribes as well as an updated Hatchery Action Implementation Plan (HAIP) for the Snohomish basin, which is currently under development[3].

Summarized 3-Year Outcomes: We continue to evaluate and annually report on the continuing programs mentioned above. The results of the studies of gene flow and ecological interactions will be applied to modify hatchery management assumptions as soon as new findings become available. The comanagers expect to complete the Snohomish HAIP within the near future.

Funding: Much of the implementation of the hatchery plan is funded through hatchery reform funds granted to WDFW and the Tulalip Tribes. The remainder is funded with normal operations funds available to the comanagers. Monitoring of ecological interactions in the estuary is part of a NOAA Fisheries funded project, with a substantial in-kind contribution made by the Tulalip Tribes. Gene flow studies have been funded through Pacific Salmon Commission LOA funds as well as Hatchery Reform funds granted to the Tulalip Tribes.

Changes between 2009 and 2010: The hatchery management program is substantially the same in 2010 as in 2009. Once the Snohomish HAIP is completed, there will likely be some changes.

[3] See also "Snohomish Region Hatchery Program Overview", 2009, available from the WDFW and Tulalip Tribes.

H-Integration

Framework: Management within each H is already coordinated to some degree with the other H's, as indicated in the above sections. Completion of the monitoring and adaptive management plan, currently under development by the Technical and Policy Development Committees, will enhance this coordination. Ultimately, the question for understanding our progress towards salmon recovery is, *what is the cumulative effectiveness of all our actions, and what is the relative effect of habitat, harvest, and hatchery management on our ability to reach our goal.* Our ability to answer this question will depend on information about resource status over time (such as spawning escapement and juvenile outmigration abundance) and information that enables us to draw relationships between management actions and fish response.

Summarized 3-Year Outcomes: In 2010, the Technical Committee will complete a more detailed version of a monitoring plan, with the Policy Development Committee adding sections to address socio-economic issues and identify an adaptive management framework. Currently, information collected to inform harvest management provides an important dataset to allow us to understand the cumulative impact of H-management over time. Annual estimates of natural spawning escapement are completed by WDFW using a combination of aerial, boat, and foot surveys of redds throughout the basin. The redd counts are expanded by an assumed ratio of fish to redds to derive the estimate of the total number of Chinook salmon spawning naturally in the basin. Since 1997, the spawning escapement estimates have been partitioned into natural- and hatchery-origin components from samples of spawned-out carcasses throughout the basin. Carcasses with thermally-marked otoliths, coded-wire tags, or missing adipose fins are classified as being of hatchery origin, and all others are assumed to be of natural origin. Juvenile out-migrant numbers are estimated annually using traps in the lower Skykomish and Snoqualmie Rivers.

In addition, there are several projects on the work plan that explicitly cross Hs. Integrating hatchery and habitat management include the estimation of the presence of hatchery-origin adult Chinook on the spawning grounds in different habitats throughout the system as well as the artificial passage of Chinook in the South Fork Skykomish River over Sunset Falls into otherwise inaccessible habitat. Harvest and hatchery integration includes directing fisheries on hatchery production through selective recreational fishing opportunities in Port Gardner – Saratoga Pass area and in the Skykomish River when hatchery-origin Chinook are transiting those areas as well as management of the tribal fishery in Tulalip Bay in time and area to focus on Tulalip Hatchery fish.

Funding: Spawning escapement estimation is funded by WDFW operational funds. The breakout of natural- and hatchery-origin fish is funded mainly through hatchery reform funds competed for annually by the Tulalip Tribes, with in-kind contributions from WDFW. The certainty of hatchery reform funds remaining available into the future is questionable. Juvenile outmigrant smolt trapping operations have been funded annually through Coastal Salmon recovery funds granted to the Tulalip Tribes. Completion of the monitoring plan will also yield a more complete cost picture.

Changes between 2009 and 2010: These programs have not changed substantially between 2009 and 2010. In this work plan we attempt to draw greater attention to projects that have cross-H implications.

Pace/Status Question: *What is the status of actions underway per your recovery plan chapter? Is this on pace with the goals of your recovery plan? What is the general status of implementation towards your habitat restoration, habitat protection, harvest management, and hatchery management goals?*

The tables that follow (p. 11-15) shows implementation – or activity – progress toward the Plan's restoration targets. It is part of an iterative process in monitoring, reporting and adaptively managing the strategies and actions outlined in the Plan and will continue to evolve in the future. The table neither reflects the effectiveness of the projects implemented (achieving full ecological function), nor does it reflect the overall changes in the watershed landscape (planted riparian areas vs. areas lost due to development or channel migration). Our restoration actions are long-term investments toward achieving habitat conditions that will support healthy Chinook populations. Some actions, such as removal of a migration barrier, realize immediate impacts, while others such as riparian plantings take decades to reach maturity. While building a mature riparian forest takes time, the actions in the table are critical to our ultimate goal of restoring natural processes. The values in the table also have a range of confidence associated with them. Confidence in the figures is eroded where we have less data on exact overlap with focus reaches, more project sponsors implementing projects, a range of restoration methodologies and approaches to measuring outcomes, and issues of how to quantify restoration outcomes where we "let the river do the work for us." Again, monitoring these actions and their associated effectiveness will evolve and change over time, and both project sponsors and the Technical Committee remain supportive of resolving these issues.

Table 1: Habitat Protection	2005 Intact	Status	3-Year Outcome Needed to be on Track in 3 yrs?	Work Plan Meets this Need?
Nearshore Beaches and Shoreline:		Habitat loss is not systematically monitored throughout the basin. Current status information includes: • Mainstem riparian loss pilot (Snohomish County only) • Snohomish County CAR monitoring • King County CAO monitoring • Acquisition reporting	Snohomish Basin Watershed Characterization and Protection (grant submitted to EPA / Puget Sound Watershed Assistance Grant) funded and Watershed Characterization and Characterization of reach-scale processes within protection priority sub-basins work elements completed. Development and implementation of Status and Trend (Cumulative Effectiveness) element of Basin Monitoring Plan	Yes
Riparian Areas (focus reaches)	297 acres			
Edge Habitat (focus reaches)	22 miles			
Estuary: Tidal Marsh				
Riparian Areas (focus reaches)	165 acres			
Edge Habitat (focus reaches)	27 miles			
Forest Cover	687 acres			
Mainstem-primary:				
Riparian Areas (focus reaches)	5,991 acres			
Edge Habitat (focus reaches)	236 miles			
Forest Cover	116,633 acres			
Mainstem-secondary:				
Riparian Areas (focus reaches)	2,497 acres			
Edge Habitat (focus reaches)	79 miles			
Forest Cover	44,935 acres			
Rural Streams Primary:				
Riparian Areas (focus reaches)	709 acres			
Forest Cover	18,286 acres			
Rural Streams Secondary:				
Riparian Areas (focus reaches)	258 acres			
Forest Cover	36,624 acres			
Urban Streams				
Riparian Areas (focus reaches)	137 acres			
Forest Cover	8,558 acres			
Headwaters Primary Protection				
Riparian Areas (focus reaches)	1,318 acres			
Forest Cover	61,865 acres			

Table 2: Habitat Restoration	Needed Habitat Gain in 10 years	Progress since 2005	Percent 10-year Benchmark	Currently on Target to Meet Benchmark?	3-Year Outcome Needed to be on Track in 3 yrs?	Work Plan Meets this Need?
Nearshore Beaches and Shoreline	At least 1 mile	0.2 mi	20%	Progress Made	feasibility / assessment	Unknown
Estuary: Tidal Marsh	1,237 acres	375 acres	30%	Progress Made	at least 491 acres	Unknown
Mainstem-primary:						
Restored Edge Habitat	10.4 miles	1.5 mi	14%	No	at least 5.8 mi.	No
Restored Riparian Habitat	256 acres	147 acres	57%	Yes	Unknown, given lack of information about habitat loss/project performance	Unknown
Restored Off-channel Habitat	167 acres	25 acres	15%	No	At least 58.5 acres	No
Large Woody Debris	41 logjams			Yes	Unknown, given lack of information about habitat loss/project performance	Unknown
Mainstem-secondary:						
Restored Riparian Habitat	6 acres		0%	No	4.2 acres	No
Restored Off-channel Habitat	6 acres		0%	No	4.2 acres	No
Rural Streams Primary:						
Restored Riparian Habitat	13 acres	4 acres	31%	Progress Made	5.1 acres	Unknown
Restored Off-channel Habitat	10 acres		0%	No	7 acres	No
Rural Streams Secondary:						
Restored Riparian Habitat		11 acres	met assuming no habitat loss	Yes	Unknown, given lack of information about habitat loss	Unknown
Restored Off-channel Habitat	41 acres	7 acres	17%	No	21.7 acres	No
Urban Streams:						
Restored Riparian Habitat	75 acres	16 acres	21%	Progress Made	37 acres	No
Restored Off-channel Habitat			met assuming no habitat loss	Yes	Unknown, given lack of information about habitat loss	Unknown

Table 3: Hatchery Operations	Quantifiable Goal	Information about Progress	Currently on Target to Meet Benchmark?	Priority (High, Medium, Low)	3-Year Outcome Needed to be on Track in 3 yrs?	Work Plan Meets this Need?
Potential negative ecological interactions between hatchery- and natural-origin fish	Finish study and develop more specific goals. Ecological interactions to minimally impact recovery potential. Add a date - goal to establish a more quantifiable benchmark.	Currently studying ecological interactions in freshwater, estuarine and nearshore habitats (NOAA Fisheries and Tulalip). No endpoint for applying results to hatchery programs has been identified.	The effect of ecological interactions is currently unknown. Making progress on research, but need report on results to date.	High	Need analysis of available data. Redesign of studies to focus on hatchery-natural interactions.	
Potential decreased genetic diversity and fitness through hatchery-origin adult spawners straying and interbreeding with natural-origin fish in natural spawning areas	• Short-term Benchmark: PNI > 0.50 • Long-term Goal: PNI > 0.70 • 100% of the broodstock from within the system • 300 to 700 natural origin fish (NOB) used in the integrated broodstock program	1) Annual estimates of PNI determined from gene flow between hatchery- and natural-origin fish. 2) Relate gene flow to proportions of hatchery- and natural-origin fish observed in hatchery and natural escapements.	Yes	High	Continue NOR/HOR proportion assessments and gene flow assessments in hatchery and natural stock components.	
Reduction of NOR escapement due to incorporation of NOB in hatchery broodstock	Restrict taking of NOB to Sunset Falls and upper Wallace River Hatchery returns only. Limit the number of NOB taken from Sunset Falls to a maximum of 20% of the return annually. Prohibit removals of natural-origin fish in years of critical escapement.	1) Number of NOB taken from natural areas relative to total NOR escapement.	On target for PNI now, but need to improve methods to assess gene flow.	High	1) Increase NOB on spawning grounds, 2) Continue NOB monitoring, 3) Improve gene flow monitoring.	
Introduction of non-local hatchery broodstock into the watershed	Use only Skykomish native broodstock to provide gametes for Wallace River and Tulalip Hatcheries.	Percentage of eggs from Skykomish broodstock	Yes	High	1) Maintain 100% of broodstock from Skykomish summer Chinook. 2) Need new Tulalip/WDFW Hatchery MOU Agreement to assure this.	
Migration delay or blockage - Wallace River	200 pairs passed above Wallace Hatchery weir.	Number of Chinook passed above Wallace River Hatchery each year.	See data summary*	Medium	Continue to implement Hatchery MOU Agreement.	
Migration delay or blockage - Tokul Creek steelhead hatchery	Pass all NOR Chinook that reach the Tokul Creek Hatchery to upstream habitat.	Number of [NOR] Chinook passed above Tokul Creek Hatchery each year.	Unknown, need information from WDFW	Medium	Document progress and maintain fish passage program.	

Table 4: Fisheries Management	Quantifiable Goal	Information about Progress	On Target to Meet Benchmark?	Priority (High, Medium, Low)	3-Year Outcome Needed to be on Track in 3 yrs?	Work Plan Meets this Need?
Adoption of a preseason plan consistent with RER guideline	Rebuilding exploitation rate in the plan	Projected annual exploitation rates (total and SUS) from preseason plan.	Consistent w/ plan but not RER (see Snohomish Chinook FRAM 2009 Validation Analysis.xlsx))	High		Yes *
Implementation of fishing plan consistent with preseason plan	Preseason projected exploitation rate	Post-season estimate of exploitation rate (from post-season FRAM run)	Yes, recently (see Snohomish Chinook FRAM 2009 Validation Analysis.xlsx)	High	Continue attention to in season management plus implementation of new PST annex	Yes *
Develop tool to separately assess exploitation rate on Snoqualmie population	Five years of Snoqualmie-specific exploitation rates and productivity are available by 2018.	Samples collected and genetic analysis completed for Snoqualmie GSI baseline. Need to be incorporated into coast-wide baseline.	Regular fishery sampling and processing not started yet. Baseline modification and coast-wide sampling must begin within the next year to get on target. Currently not on target.	Med	1. Have separate Skykomish and Snoqualmie baselines in coast-wide baseline. 2. begin regular GSI fishery sampling and sample processing.	No
Development of Snoqualmie specific RER	Separate Snoqualmie and Skykomish - specific RERs are available by 2019.	RER developed based on Snoqualmie data	Work not started yet. Depends on the above.	Med	Depends on other work. Not ready in three years.	No
Harvest practices do not alter spatial distribution or age distribution of spawners (controlled by ecological factors)	Expected spatial and age distributions under zero harvest.	observed (after harvest) distribution = expected if no harvest	Work not started yet Plan hypothesizes that reduced harvest rates will also result in reduced effects on age and spatial distribution	Low	Next step is to develop model comparing observed and expected distributions	No

Table 5: H - Integration	Quantifiable Goal	Information about Progress	Currently on Target to Meet Benchmark?	Priority (High, Medium, Low)	3-Year Outcome Needed to be on Track in 3 yrs?	Work Plan Meets this Need?
All-H: Natural spawning escapement	1) NOR Numbers increasing towards recovery goal 2) Spatial distribution	1) Annual estimate of natural NOR spawning escapement 2) annual estimates by subwatershed	Uncertain	High	1) 8-year average NOR escapement exceeds previous 8 year average	Yes, except spatial delineation of escapement estimation
All - H: Social capital infrastructure - support diverse recovery efforts and to diffuse outreach messages.	none identified	2 Tribal Governments, 6 local governments, 2 state agencies, 8 non-profits actively involved in program and project identification. 41 agencies and organizations represented on the Forum.	Unknown	High		
Habitat and Harvest: Smolt outmigration monitoring.	NOR numbers increasing towards recovery goal	Annual estimates of NOR outmigrants from Skykomish and Snoqualmie populations	Uncertain	High		
Habitat and Hatchery: Identify hatchery fish where they are so that we can better understand natural fish production.	Mass marking of fish: WRH: All production is adipose fin-marked except for double index tag groups. WRH: 400,000 fingerling released CWT, 50,000 yearling CWT marked. Tulalip Hatchery Chinook: 80% adipose fin-marked (current goal); 100,000 CWT; 100% mass marked with unique thermal otolith marks.	Number of fish marked and tagged annually	Yes	High		
Harvest and Hatchery: Target hatchery fish in harvest	Conduct time-area management in Area 8D and in the Skykomish River, target selective fisheries on adipose fin-marked fish above where and when appropriate.					
Habitat and Hatchery: Pass fish above Sunset Falls to otherwise inaccessible habitat	Pass all fish reaching the Sunset Falls fish trap less the ones needed for hatchery integration.	Number of fish passed annually	Yes	Not assigned		Yes *
Habitat Protection, Habitat Restoration, and Water Quality: Build awareness about environmental problems	none identified	Puget Sound Partnership Public Opinion Survey				
Habitat Protection, Habitat Restoration, and Water Quality: Effect behavior changes, implementation of BMPs	No overarching goal identified. Some programs identify specific goals	At this time lacking basin framework to evaluate the relationship between behavior changes and habitat and water quality trends.				

Sequence/Timing Question: *What are the top implementation priorities in your recovery plan in terms of specific actions or theme/suites of actions? How are these top priorities being sequenced in the next three years? What do you need to be successful in implementing these priorities?*

In this 3-year work plan, cross-H considerations are more explicitly identified, illustrating that resource managers in the different H sectors are aware of general H-integration issues. At this point we are not able to prioritize or sequence across the H's, nor evaluate resource allocation across the Hs. This type of undertaking might be a valuable analysis for the Snohomish Basin.

Habitat: A fundamental sequencing issue is that if habitat is lost over time, then restoration needs increase. Protection is prioritized over restoration, given restrictions in many projects that prevents full restoration in many situations, and lag times associated with realizing ecological function once a project has been implemented.

Habitat Protection: While the pace of development has slowed with the recent economic downturn, we still anticipate substantial development pressures in the Snohomish Basin. Some ecological stressors associated with the spread of impervious surfaces associated with development, such as altered hydrologic and sediment processes, will also be exacerbated by climate change. Simultaneously, limited natural resources (such as water and land) are placing different societal interests in direct competition.

Although the Snohomish River Conservation Plan identified a general habitat strategy that prioritized protection actions over restoration efforts and identified general protection tools, this plan did not establish protection priorities or a protection strategy. This strategy is needed to analyze those areas at the highest risk of degradation, areas where degradation has the greatest impact, and the efficacy of using different protection tools to meet our goals. Even though this strategy is needed to ensure protection of our highest priority areas, on the ground protection efforts cannot be placed on hold until this analysis is completed. The Plan provides good general guidance for protection needs, and should inform these efforts in the interim.

Habitat Restoration: One consideration for sequencing in project priority. The Snohomish River Basin Salmon Conservation Plan lays out a robust framework that prioritizes restoration actions (Appendix B). This work plan further refines this prioritization scheme by adding implementation progress, sponsor capacity, and a rough sequencing element to more clearly categorize projects into *most pressing need, pressing need, need* (Appendix C). Through this process, Tier 1 projects with sponsor capacity, that address lagging benchmarks are identified as being our *most pressing needs* – the most critical projects to complete soon. These projects tend to be projects in the mainstem primary sub-basin strategy group that will restore off-channel or edge habitat, estuary projects to restore tidal marsh, and nearshore projects to protect or restore beach habitat. Project identified as being a *pressing need* include Tier 1 actions that address benchmarks that are currently on pace to meet 10-year benchmarks (e.g., mainstem primary riparian restoration) and Tier 2 and 3 actions that are not pace to meet 10-year benchmarks (e.g., mainstem secondary, rural, and urban riparian restoration). While advancing these projects are not as urgent as those categorized as *most*

pressing need, it is important that we maintain our current pace for Tier 1 actions currently on pace, and accelerate out implementation rate for lower tier projects that are behind in implementation, as resources allow. The final category of projects, those identified as *need*, reflect projects that are part of the salmon recovery plan and are needed to reach salmon recovery. It is important that we continue to advance these projects too, especially as resources allow.

Prioritization alone does not identify which projects should be implemented in what order. At this time, additional sequencing considerations are being addressed to varying degrees on the Subbasin Strategy Group scale. Estuary monitoring partners are working collaboratively to coordinate which projects will apply for what funding, and projects are coming on-line at different times. In the nearshore, there are planned efforts to prioritize and sequence restoration and protection projects. For large, mainstem river projects, sequencing is presently driven by the capacity of the project sponsors able to implement projects of this scale. The project working group has voiced general support for coordinating and sequencing projects on a smaller scale, particularly to reduce in-basin competition for funds.

Harvest Management: The harvest management plan was developed based on the current production potential of the habitat. Therefore, if habitat stays the same or improves, the harvest guidelines should be sufficiently conservative to achieve the goal of not impeding recovery. On the other hand, if habitat degradation continues, then the guidelines may not be conservative enough. We expect the beneficial effect of harvest management actions to be apparent within a short time period, while habitat actions will take longer to manifest themselves in improved population performance. However, harvest management actions cannot contribute effectively to recovery without concurrent improvement in habitat.

Hatchery Management: Since 2005, natural-origin Chinook returning to the Wallace River and Sunset Falls fish traps have been selected and incorporated into the Wallace River Hatchery broodstock according to the guidelines in the WDFW/Tulalip Hatchery MOU Agreement. Tulalip is also conducting studies to directly determine the degree of gene flow between the hatchery and natural populations so that gene flow and assumptions of potential fitness loss can be more accurately estimated. Studies of ecological interactions in the Snohomish estuary continue. A comprehensive report is expected within the next year, after which we will evaluate implications for hatchery management. Passage of natural-origin Chinook over the Tokul Creek and Wallace River weirs continues, as does trucking of fish over Sunset Falls. Fishery management continues to target hatchery-origin Chinook through mark-selective recreational fisheries and time-area management methods in Tulalip Bay.

H-integration: Basic stock assessment activities are the key to evaluating the efficacy of the strategies in all of the H's. Spawning escapement programs were originally designed only for the purpose of evaluating harvest management, but are being refined to assess the spatial distribution of spawners in a manner that can be correlated with habitat type and condition. Similarly, juvenile outmigrant assessment programs are used to predict subsequent adult returns to facilitate harvest management, but they also serve as a basis for measuring overall

population productivity and particularly assessment of the time trends in the ability of the freshwater habitat to produce viable outmigrant smolts. The breakout of the escapement into natural- and hatchery-origin components provides one evaluation of the potential effect of hatchery fish on natural populations through interbreeding, but it also allows us to document time trends in natural population abundance, productivity, and spatial distribution relative to hatchery-origin fish. A remaining, missing piece in overall stock assessment is the need to document trends in life history diversity, which could be ascertained through otolith pattern analysis, scale pattern analysis, or a combination of these imaging methods. Overall, the stock assessment work is the bottom line needed to assess overall performance of the recovery plan.

Next Big Challenge Questions:

Do these top priorities reflect a change in any way from the previous three-year work program? Have there been any significant changes in the strategy or approach for salmon recovery in your watershed? If so, how & why?

This work plan contains no significant changes, but rather reflects continued refinement, especially in regards to our approach to habitat protection, climate change, and H-integration. The question that was posed by last year's reviewers, *if plan isn't being fully funded, what is the implication for prioritization* is critical question that still needs to be addressed. This is an issue not only for the Snohomish Basin, but for Puget Sound in general.

What is the status or trends of habitat and salmon populations in your watershed?

Salmon Populations

Currently escapement data provides some indication of population performance. Following the decline in harvest rates of the mid-1990s, natural spawning escapement increased (Fig. 2), although it has begun to show a strong odd-even year fluctuation and a decline since the peak year of 2004. A comparison of the distribution of fishing mortality and escapement under the 2007 and 2009 preseason fishing plans shows the expected gain from implementing the new Chinook annex in the Pacific Salmon treaty (Fig.3). However, escapement only provides us with one view of population performance. Work is underway to extend this analysis to brood year production for the Snohomish. A better understanding of juvenile survival will also be critical for understanding trends in overall population performance.

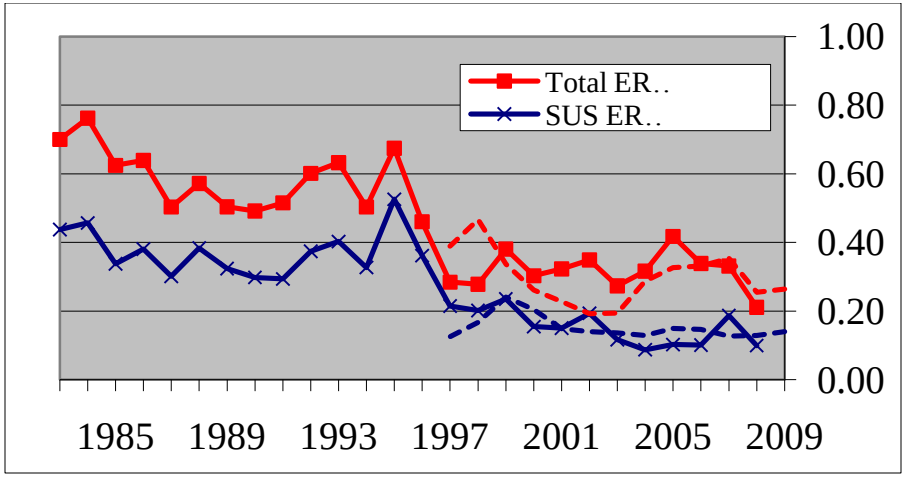


Figure 1. Trend in exploitation rates on Snohomish basin Chinook salmon as measured by the FRAM model, 1983-2009. Red line ("Total") is total exploitation rate, blue line ("SUS") is the portion of this south of the US/Canada border. Solid lines are post-season estimates; dash lines are preseason predictions.

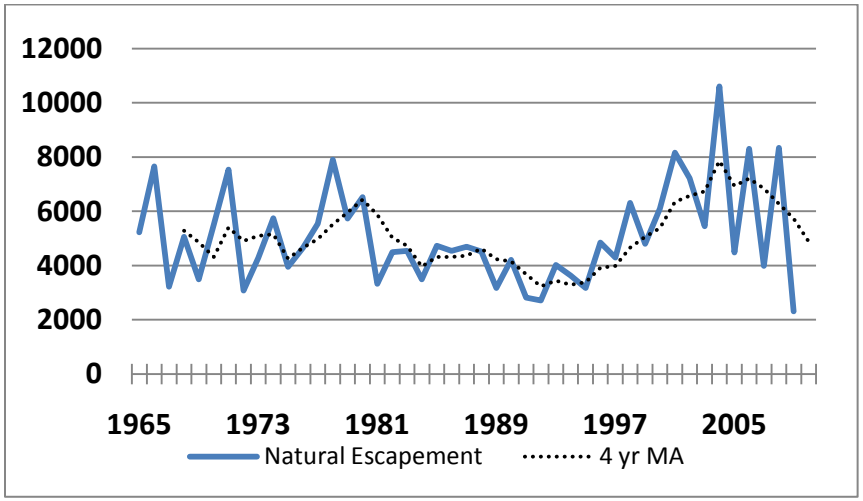


Figure 2. Trend in natural spawning escapement for Snohomish Chinook salmon 1965-2009.

Habitat Trends

At this time we are unable at this time to identify habitat trends, with the possible exception of estuary marsh habitat which is easier to track. The lack of information about habitat trends makes it impossible to know for sure if we are on pace to meet 10-year habitat benchmarks, which are determined by habitat area that remains intact plus restoration gains over the 10-year period.

Given difficulties in habitat trend detection, annually is not the appropriate spatial scale to track habitat change. Thus, adaptive management decisions to direct restoration efforts will be imperfect and rely heavily on project implementation information. The Technical Committee is currently addressing habitat trend monitoring through the cumulative effectiveness section in the WRIA 7 monitoring plan (in progress).

Are there new challenges associated with implementing salmon recovery actions that need additional support? If so, what are they?

Habitat Mitigation Projects

Some projects in the nearshore and estuary are linked to mitigation sites. The Forum has not yet determined how to count habitat gains on projects that involve mitigation and restoration. The Forum is seeking to consensus on how to measure the habitat gain on projects where a sponsor completes additional work to required mitigation. This discussion is part of the Forum work plan within the next couple of years.

Public Support for Salmon Restoration

- Outreach at the regional scale should focus on awareness and understanding of ecosystem and salmon issues, while providing direction, funding and guidance for change facilitators (e.g., watersheds), and change agents (e.g., fisheries enhancement groups) to focus on programs that change behaviors to either implement best management practices or habitat protection.
- Many current outreach efforts (especially targeted at adults) are driven by NPDES permit requirements and water quality concerns. While there are overlaps in messaging for water quality protection and salmon recovery, we need to evaluate what gaps have been created in the shift of the driver for public outreach from salmon to water quality.
- In addition to outreach for behavioral change, outreach needs to capture large scale project public outreach and what the basin is doing and why (i.e. try to get out of a reactive mode and into a proactive approach). The basin needs to be more strategic in public outreach so that positive stories get as much media as negative incidents.

- We need to focus effort on how to engage the volunteer community in a meaningful way. Existing programs assume that we can perpetuate the restoration economy based on volunteers forever.

Balancing Societal Priorities

The current economic situation underscores the realities of balancing societal needs. Particularly in the last couple of years, local and state governments have had very low revenues, forcing decision-makers to make difficult funding decisions and forcing prioritization to allocate limited dollars. Given the current revenue realities, recent funds allocated to Puget Sound environmental issues, especially from the state and the federal government, speak to the realized importance of environmental needs.

Agricultural Preservation and Habitat Restoration

The Snohomish Basin, much like the region in general, has been working through issues associated with competing land uses. Within our Basin, both King County and Snohomish County are working through processes to more formally evaluate competing needs from farm preservation and fish recovery efforts. King County developed a public rule which prescribes how King County will ensure that restoration projects in the Agriculture Production District are compliant with county code. This rule provides a more formal process to approve proposed restoration, and assigns responsibility to the King County Department of Natural Resources and Parks to assist the Department of Development and Environmental Services in making determinations.

In Snohomish County, both the Executive and the Council have established stakeholder processes to address competing agricultural and fish restoration interests. The Executive's process involves a smaller stakeholder group (the Tulalip Tribes, the Stillaguamish Tribe, 2 Agricultural Advisory Board members and the Cascade Land Conservancy are participating) and will address immediate concerns raised by current restoration projects. This process is also expected to yield guiding principles to direct further efforts to balance habitat restoration and agriculture preservation needs. The council's process will include more diverse representation, and as a function of the council, will have the authority to develop policy.

At this point, new policy direction or code interpretation has not directly affected project implementation. Individual project sponsors with a geographic scope larger than the Snohomish Basin have expressed that burdensome local requirements associated with agricultural concerns could be a deterrent for working in the basin. At this point we do not know how policy will impact our ability to reach habitat benchmarks in the estuary and along the mainstem rivers.

Large Wood Placement and Boater Safety

In response to Ordinance 16581 that was adopted by the King County Council in 2009, King County led a stakeholder process to develop procedures for King County to follow to consider public safety in the design and placement of large wood in streams and rivers, evaluate strategies for wood placement to maximize ecological benefits and minimize public safety risks, and receive public input on large wood placement. The majority of public input on the administrative rule expressed concern that the rule would hinder salmon recovery efforts and disagreement with the policy-basis of the rule. We do not know at this point how the rule will impact the quality large wood placement projects, the rate of implementation, or the spatial distribution of wood placement.

Further clarification on integration

Since 2007, the Puget Sound Partnership (PSP) and local partners (tribes, cities, counties, project sponsors, watershed groups and MRCs) have been working to ensure that the elements of the Action Agenda will work synergistically to recover Puget Sound by 2020. In 2007, development of the Action Agenda started around the seven legislated Action Areas (from the PSP's authorizing legislation, RCW 90.71). With the completion of the first Action Agenda in 2008, the PSP has been working with local partners on the appropriate way in which to involve local partners in implementation of the Action Agenda – in terms of scale and involvement.

In 2009, PSP initiated a second look at the Action Areas with the above implementation involvement thoughts in mind. Local partners are working with PSP on this issue and hope to have it resolved in 2010. We need to come to a decision on how this involvement piece will advance and how local actions are implemented (across salmon recovery, stormwater, marine spatial planning, etc.), which have ramifications on local budgets as well as requests for funding.

Challenges associated with the scale of restoration needed

- Grant period: 18 months is not sufficient for projects that are as large and complex as we need to implement. Grant periods need to be scaled to the size and complexity of the project.
- Project sponsors are beginning to take on larger projects to advance priority actions identified in the Plan:
    - Technical support is increasingly available for earlier stages of project development, but support in understanding the analytical process needed to engage in process-level work, the skills needed

    - Project manager skill and abilities
    - Ability of non-profit to match grants
- We need assistance in dealing with institutional knowledge. In numerous areas around Puget Sound, staff are nearing retirement age, with no one to back them up. We are about to lose considerable knowledge and capability that will set us back a decade in our ecosystem recovery efforts. We must find ways to address this critical gap. One suggestion during the Action Agenda process was the funding of an innovative "Centers of Excellence" program, which would bring key, innovative knowledge to partners around the Sound.

Monitoring and maintenance needs

The Snohomish Basin Project working group has identified project-specific maintenance and monitoring as a critical step needed to ensure project success, but one for which it is difficult to obtain funding. Given the amount that is invested in restoration, and the critical role restoration plays in our recovery strategy, it is imperative that we fund them through all the phases in order to increase the rate of success, and to systematically evaluate our efforts so that we better understand if our projects are having the beneficial impacts that we expect them to have.

Appendix A: Subbasin Strategy Group Definitions

The 62 sub-basins in the Snohomish River basin plus the nearshore were organized into 12 strategy groups based on three characteristics:

1. Basin location. The five major classifications are nearshore, estuary, mainstem rivers, lowland tributaries, and headwaters. This classification system is useful in developing a restoration strategy because sub-basins within these groups play similar roles in supporting salmon life histories and have similar geomorphic characteristics and land use issues.

2. Condition of watershed processes. Watershed processes drive habitat conditions and, in turn, population performance. The root causes of habitat loss occur on a sub-basin scale. Addressing the root causes of habitat degradation is critical for a successful recovery strategy. Watershed process conditions analyzed and modeled include the current conditions of hydrology, sediment, and riparian processes.

3. Salmonid use. Sub-basins were grouped based on their current Chinook and bull trout use and potential use. Salmonid populations are not distributed uniformly across the landscape. Identifying areas of high and potential use helps to direct scarce resources to where they will have the greatest effect. Sub-basins that have high and moderate coho use are identified in each strategy group. Many sub-basins include focus reaches where recommended actions may be targeted.

Sub-Basin Strategy Group	Salmonid Use/Watershed Condition
Nearshore	High use/Moderately degraded
Estuary	High use/Degraded
Mainstem Primary Restoration	High use / Moderately degraded or degraded
Mainstem Secondary Restoration	Moderate use / Moderately degraded
Rural Streams - Primary Restoration	Moderate use / Moderately degraded
Rural Streams - Secondary Restoration	Low use / Moderately degraded
Urban Stream Restoration	Low use / Degraded
Headwaters - Primary Protection	High use / Intact
Headwaters - Secondary Restoration	Moderate use / Moderately degraded
Headwaters - Secondary Protection	Low use / Intact
Headwaters - Protection Above Natural Barriers	Resident population only / Intact
Headwaters - Protection Above Falls and Dams	Resident population only / Moderately degraded

Appendix B: Plan Tiering Criteria for Habitat Capital Actions

Tiering criteria was established *Plan*. Each individual project was tiered into 1 of 4 levels according to the priority action outlined for the sub-basin strategy group where the project is located.

Sub-basin Strategy Group	Tier	Action
Nearshore	1	Preservation
Nearshore	1	Restore shoreline condition
Nearshore	1	Restore sediment processes
Nearshore	1	Riparian enhancement
Nearshore	2	Protect and/or restore water quality
Nearshore	2	Control invasives
Estuary	1	Preservation
Estuary	1	Reconnect off-channel habitats
Estuary	1	Improve fish passage and tidal exchange on tide-gated streams
Estuary	1	Restore shoreline conditions
Estuary	1	Riparian enhancement
Estuary	2	Addressing water quality impacts
Estuary	2	Enhancing in-stream structures
Mainstem Primary	1	Preservation along focus reaches
Mainstem Primary	1	Preservation to support hydrologic and sediment processes
Mainstem Primary	1	Removal of human-made in-stream barriers along or adjacent to priority reaches
Mainstem Primary	1	Reconnection of off-channel habitats
Mainstem Primary	1	Restoration of shoreline conditions
Mainstem Primary	1	Restoration of hydrologic and sediment processes (for peak flow and base flow)
Mainstem Primary	1	Riparian enhancement
Mainstem Primary	2	Addressing water quality impacts
Mainstem Primary	2	Enhancing instream structures
Mainstem Primary	other	Fish passage on Coho streams

Sub-basin Strategy Group	Tier	Action
Mainstem Secondary	1	Preservation to support hydrologic and sediment processes
Mainstem Secondary	1	Restoration of hydrologic and sediment processes (for peak flow and base flow)
Mainstem Secondary	2	Preservation along focus reaches
Mainstem Secondary	2	Removing human-made in-stream barriers along or adjacent to priority reaches
Mainstem Secondary	2	Restoring shoreline conditions
Mainstem Secondary	2	Enhancing riparian areas
Mainstem Secondary	3	Addressing water quality impacts
Mainstem Secondary	3	Enhancing in-stream structures
Rural Streams Primary	1	Preservation to support hydrologic and sediment processes
Rural Streams Primary	1	Restoration of hydrologic and sediment processes (for peak flow and base flow)
Rural Streams Primary	2	Preservation along focus reaches
Rural Streams Primary	2	Removing human-made in-stream barriers along or adjacent to priority reaches
Rural Streams Primary	2	Restoring shoreline conditions
Rural Streams Primary	2	Riparian enhancement
Rural Streams Primary	3	Addressing water quality impacts
Rural Streams Primary	3	Enhancing in-stream structures
Rural Streams Primary	other	Replacing culverts on small streams
Rural Streams Secondary	1	Preservation to support hydrologic and sediment processes
Rural Streams Secondary	1	Restoration of hydrologic and sediment processes (for peak flow and base flow)
Rural Streams Secondary	3	Preservation (along focus reaches)
Rural Streams Secondary	3	Removing human-made instream barriers along or adjacent to priority reaches
Rural Streams Secondary	3	Restoring shoreline conditions
Rural Streams Secondary	3	Riparian enhancement
Rural Streams Secondary	3	Addressing water quality impacts
Urban Streams	3	Preservation (along focus reaches)

Sub-basin Strategy Group	Tier	Action
Urban Streams	3	Removing human-made in-stream barriers along or adjacent to priority reaches
Urban Streams	3	Restore shoreline conditions
Urban Streams	3	Riparian enhancement
Urban Streams	3	Addressing water quality impacts
Urban Streams	4	Instream structural enhancement
Headwaters Primary Protection	1	Preserving habitat along focus reaches
Headwaters Primary Protection	1	Preserving habitat to support hydrologic and sediment processes
Headwaters Primary Protection	1	Restore shoreline conditions
Headwaters Primary Protection	2	Enhance marine-derived nutrients (North Fork Skykomish only)
Headwaters Secondary Restoration	1	Preserve hydrologic and sediment processes
Headwaters Secondary Restoration	1	Restore hydrologic and sediment processes (for peak flow and base flow).
Headwaters Secondary Restoration	2	Preservation (along focus reaches)
Headwaters Secondary Restoration	2	Remove human-made instream barriers along or adjacent to priority reaches
Headwaters Secondary Restoration	2	Reconnect off-channel habitats
Headwaters Secondary Restoration	2	Restore shoreline conditions
Headwaters Secondary Restoration	2	Enhance riparian habitat
Headwaters Secondary Restoration	3	Address water quality impacts
Headwaters Secondary Restoration	3	Enhance marine-derived nutrients
Headwaters Secondary Restoration	3	Enhance in-stream structure
Headwaters Secondary Restoration	other	replace culverts on small streams
Headwaters Secondary Protection	1	preserve hydrologic and sediment processes
Headwaters Secondary Protection	3	Preservation along focus reaches
Headwaters Secondary Protection	3	Remove human-made in-stream barriers along or adjacent to priority reaches
Headwaters Secondary Protection	3	Reconnect off-channel habitats
Headwaters Secondary Protection	3	Restore shoreline conditions
Headwaters Secondary Protection	3	Address water quality impacts

Sub-basin Strategy Group	Tier	Action
Headwaters Secondary Protection	other	replace culverts on small streams
Headwaters Protection Above Natural Barriers	1	protect watershed processes that support habitat on federal forest lands
Headwaters - Restoration Above Falls and Dams	1	Preservation to support hydrologic and sediment processes
Headwaters - Restoration Above Falls and Dams	1	Restore hydrologic and sediment processes (for peak flow and base flow).
Headwaters - Restoration Above Falls and Dams	3	Riparian enhancement
Headwaters - Restoration Above Falls and Dams	3	Protect water quality
Headwaters - Restoration Above Falls and Dams	4	Remove human-made in-stream barriers
Headwaters - Restoration Above Falls and Dams	4	Restore shoreline conditions
Headwaters - Restoration Above Falls and Dams	5	Provide in-stream structural enhancement

Appendix C: 3-Year Work Plan Sequencing Scheme for Habitat Capital Actions

As part of the 3-year work plan update, we applied a simple categorization scheme to identify the highest priority actions needed given priorities established by the *Pla*n (2005), current progress towards 10-year benchmarks, and the considering sequencing issues and sponsor capacity. The intent of this process is not to judge the merit of each project in the work plan but rather to provide general guidance about the types of restoration action most needed and reflect the ability to advance these projects in light of project readiness. The naming convention of our categorization scheme underscores that all of the proposed actions are needed to reach salmon recovery. However, the need for some projects types, particularly given implementation progress to date, is critical.

1. **Tier assigned by the *Plan***
    a. Tier 1: +85 points
    b. Tier 2: +75 points
    c. Tier 3: +65 points
    d. Tier 4: +55 points

2. **Sponsor capacity**
    a. Sponsor currently has capacity to advance project: 0 points
    b. Sponsor currently lacks capacity to advance project : -10 points

3. **Habitat action addresses lagging 10-year benchmark** (see table 2, p. 12, percent 10-year benchmark column)
    a. < 20%: +10 points
        - mainstem primary off-channel
        - mainstem primary edge
        - rural primary off-channel
        - rural secondary off-channel
        - protection evaluation

    b. 21 – 39%: +5 points
        - nearshore beach
        - estuary marsh

- rural primary riparian
- rural secondary riparian
- urban riparian

c. > 40%: 0 points

4. **Logical Sequencing Considerations**
   a. Logical sequencing issue: -10 points
      Examples:
      - downstream fish blockage
      - project does not address primary limiting factor
      - implementation of project may impede more substantial restoration in the future

   b. Project informed by larger scale or process assessment: +5 points

Points were summed for each project, and scores ranged from 55-100. Project scores were then binned as follows:

- 90 – 100 points: *Most pressing need*
- 70 – 89 points: *Pressing need*
- < 70 points: *Need*

Appendix D: Project and Program List Color Coding

	Progress made in 2009
	Project added in 2010
	Construction Completed

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-NR-003	Habitat Restoration	Nearshore Restoration	Jetty Island South Extension Phase II	Use clean dredged material to extend Jetty Island 2,200 ft to the south along the west side of the existing rock jetty.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Beach nourishment (1 Acres), Snohomish Basin Nearshore: Beaches and Shoreline: Enhancement of nearshore armoring (LC) (2200 Feet)	Chum, Chinook, Coho, Bull Trout, Steelhead, Cutthroat, Pink	Surf Smelt, Sand Lance, Bald Eagle, Peregrine Falcon
07-NR-008	Habitat Restoration	Nearshore Restoration	Nearshore Sediment Nourishment Feasibility Study along Railroad	Identify the most suitable locations along the railroad impounded shoreline (from Pigeon Creek #1 to the unnamed stream west of Japanese Gulch in Mukilteo) for habitat restoration.	1	Most pressing need		Chinook	Chum, Coho, Pink, Bull Trout, Steelhead, Surf Smelt, Sand Lance
07-NR-009	Habitat Restoration	Nearshore Restoration	Light House Park Phase 2 Beach Restoration	Provide an additional waterfront access, 340 lineal feet of riparian shoreline vegetation, accessible pathways, a picnic table, open lawn, low impact development (LID) storm drainage swales for water quality at the Mukilteo Lighthouse Park.	1	Pressing need	Snohomish Basin Nearshore: Beaches and Shoreline: Enhancement of nearshore armoring (LC) (340 Feet)	Chinook, Bull Trout	Cutthroat, Chinook, Chum, Coho, Bull Trout, Bald Eagle, Marbled Murrelet
07-NR-010	Habitat Restoration	Nearshore Restoration	Japanese Gulch Fish Passage Improvements	Recreate a fish passable stream system that feeds into Possession Sound by addressing numerous fish passage blockages along Japanese Gulch Creek.	1	Pressing need	Activity Type - Fish Passage: Fish ladder Installed / improved (3 Each)	Chum, Coho, Bull Trout, Rainbow, Cutthroat	
07-NR-011	Habitat Restoration	Nearshore Restoration	Tank Farm Creosote Removal	Remove all cresoate pilings from around the tank farm and improve area	1	Pressing need			
07-NR-012	Habitat Protection	Acquisition - Nearshore Restoration	Tulalip Shoreline Protection and Restoration	Identify and prioritize parcels for protection and restoration along the nearshore, north of the mouth of the Snohomish River	1	Pressing need			
07-NR-014	Habitat Restoration	Nearshore Restoration	Priest Point Pocket Estuary Restoration	Reconnect tidal lagoon within private properties. Project will require considerable public outrach with the neighboring landowners.	1	Pressing need			
07-ER-013	Habitat Restoration	Estuary Restoration	Blue Heron Slough Habitat Conservation Bank	Reconnect/enhance 320 acres of off-channel habitat reconnection/enhance, 13,500 ft of edge habitat restoration, hydrologic process restoration, sediment process restoration, and riparian enhancement.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Channel modification / creation (13500 Yardst), Activity Type - Estuarine & Nearshore: Dike or berm modification / removal (350 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead, Surf Smelt, Bald Eagle, Peregrine
07-ER-033	Habitat - protection and restoration	Estuary Restoration and Acquisition	Ebey Island Feasibility Study	Study how ecological functions can best be restored on Ebey Island on the 1237-acres south of State Route 2 presently owned by WDFW, with possible additional acquisitions.	1	Most pressing need	Feasibility study and conceptual design evalutation	Chinook	Cutthroat, Chum, Coho, Bull Trout, Bald Eagle
07-ER-035	Habitat - protection and restoration	Estuary Restoration and Acquisition	Diking District 6 Inter-tidal Restoration Project	Construct setback dike and breach current dike to restore tidal influence to at least 230 acres of wetland, with additional non-tidal wetland enhancement behind the setback dike.	1	Most pressing need	Snohomish Basin Estuary: Tidal Marsh: Restoration of tidal marsh (LC) (230 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-ER-036	Habitat Restoration	Estuary Restoration	Qwuloolt Restoration - Phase III Construction	Broad-based interagency and community effort to restore 350 acres of critical estuary and stream habitats within the Snohomish River estuary and improve salmon access to 16 miles of stream channel.	1	Most pressing need	Snohomish Basin Estuary: Tidal Marsh: Restoration of tidal marsh (LC) (350 Acres)	Chinook	Cutthroat, Chum, Coho, Sockeye, Pink, Bull Trout, Steelhead

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Jetty Island South Extension Phase II	Implementation	Construction	$900,000	Monitoring		Monitoring		$900,000	12/31/2010	Port of Everett, US Army Corps of Engineers	$900,000		
Nearshore Sediment Nourishment Feasibility Study along Railroad	Assessment	Assessment	$142,280	Assesment		design		$167,480	1/1/2012	Snohomish County of, Snohomish County Marine Resources Committee (MRC)	$5,000,000		
Light House Park Phase 2 Beach Restoration	Implementation	Seeking funding	$33,600	Construction	$0	Maintenance	Non-identified	$33,600	12/31/2010	Mukilteo City of	$33,600		
Japanese Gulch Fish Passage Improvements	Implementation	Project identification and coordination, Construction for fish passage	$200,000	Project identification and coordination	$10,000	Engineering design, permitting	TBD	$210,000	3/16/2015	Mukilteo City of	$2,500,000	$150,000	City of Mukilteo
Tank Farm Creosote Removal	Design			Engineering design, permitting	$4,200,000			$4,200,000	12/31/2015	Washington State Ferries	$14,690,000		
Tulalip Shoreline Protection and Restoration	Assessment			Feasibility/ acquisition	$600,000	Feasibility acquisition	$1,200,000	$1,800,000	12/31/2015	Tulalip Tribes	$1,800,000		
Priest Point Pocket Estuary Restoration	Assessment			Feasibility	$75,000			$75,000	12/31/2015	Tulalip Tribes	$2,500,000		
Blue Heron Slough Habitat Conservation Bank	Implementation	Construction	$2,700,000	Continue planting; invasives control; monitoring	$0			$2,700,000	12/31/2011	Port of Everett	$2,700,000	$2,700,000	Mitigation
Ebey Island Feasibility Study	Assessment	Phase 2 land acquisitions, Feas. Study	$1,500,000	Phase 2 land acquisitions, Feas. Study		Phase 2 land acquisitions, Feas. Study		$1,500,000	12/31/2012	Fish & Wildlife Dept of	> $10,000,000	$367,820	ESRP, SRFB, and/or PSAR, WWRP, National Coastal Wetlands
Diking District 6 Inter-tidal Restoration Project	Design	Permitting/Design	$2,500,000	Construct setback dike / fill ditches	$2,500,000	Breach dike		$5,000,000	12/31/2015	City of Everett	$10,000,000		ACOE, National Coastal Wetlands
Qwuloolt Restoration - Phase III Construction	Implementation	Construction		Monitoring / Maintenance	300000	Monitoring / Maintenance	300000	$600,000	12/31/2012	Tulalip Tribes	$7,073,941	$7,093,941	

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-ER-037	Habitat Restoration	Estuary Restoration	Smith Island Estuary Restoration - Construction	Restore over 300 acres of tidal marsh through setback dike construction, breaches of existing dike , filling/blocking of existing drainage ditch network, enhancement/extension of existing tidal channels, large woody debris and log-jam complexes, edge habitat complexity features, and native revegetation.	1	Most pressing need	Snohomish Basin Estuary: Tidal Marsh: Restoration of tidal marsh (LC) (400 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-ER-038	Habitat Restoration	Estuary Restoration	Bigelow Creek Rechannelization and Enhancement	Rechannelization and restoration of Bigelow Creek for Salmonid habitat. Creation of intertidal habitat including creation of dendritic channels.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Hydrological manipulation (8.50 Acres), Activity Type - Instream Flow: Water Flow Returned to Stream (1000 Feet)	Chinook	Chum, Coho, Pink, Bull Trout, Steelhead
07-ER-039	Habitat Restoration	Estuary Restoration	Quilceda Estuary Restoration Hibulb Natural History Preserve	Restoration of historic estuary to approximately 5-10 acres of tidal marsh within the 60 acre Hibulb Natural History Preserve.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Dike or berm modification / removal (10 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead, Bald Eagle, Marbled Murrelet, Peregrine
07-ER-040	Habitat Restoration	Estuary Restoration	North Ebey and Mid-Spencer Islands Breach Enhancements	Increase connectivity between slough and intact marsh areas and newly restored marsh areas, such as the Qwuloot, Blue Heron Slough and Smith Island.	1	Most pressing need	Improved fish access	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-ER-053	Habitat Restoration	Estuary Restoration	Everett Riverfront North Wetland Complex	Increase tidal exchange within the wetland through construction of “distributary” tidal channels and create small planting islands, using dredge spoils from the new channels to establish forested and scrub-shrub wetland communities with the goal of re-establishing, over a 50 year period, an approximately 21.6 acre tidally influenced forested, scrub-shrub and emergent marsh similar to Otter Island.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Dike or berm modification / removal (21.60 Acres)	Chinook	Cutthroat Coho, Bull Trout, Steelhead
07-ER-042	Habitat Restoration	Estuary Restoration	Assess and improve mainstem channel habitat connectivity	Assess and improve connectivity to tidal marsh habitats located along mainstem and distributary sloughs.	1	Pressing need	Design needed	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-072	Habitat Protection	Acquisition - Mainstem Primary Restoration	Raging River Upper Preston Reach Acquisitions	Work with willing landowners to protect 24 acres of stream corridors	1	Most pressing need	Snohomish River Basin Mainstem: Restored Edge: Acquisition in the Mainstem Sub-basin Strategy Groups (LC) (24 Acres)	Chinook	Cutthroat, Coho, Steelhead
07-MPR-108	Habitat Restoration	Mainstem Primary Restoration	Tolt River Focus Area 5 Protection	Preservation (proximate to aquatic habitat): 30 acres; work with willing landowners to protect the stream corridor	1	Most pressing need	Activity Types - Acquisition/Easements/Leases : Wetland areas protected (30 Acres)	Chinook	Cutthroat, Coho, Steelhead
07-MPR-192	Habitat Restoration	Mainstem Primary Restoration	Lower Skykomish River Restoration Assessment and Design	Identify and immplement projects that will restore and protect habitat (e.g.: riparian, edge, off-channel habitat) in the Lower Reach Skykomish.	1	Most pressing need	Design needed	Chinook	Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-213	Habitat Restoration	Mainstem Primary Restoration	Tychman Slough Assessment and Design	Enhance edge habitat complexity and riparian forests	1	Most pressing need	Design needed	Chinook	Chum, Coho, Pink, Steelhead

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Smith Island Estuary Restoration - Construction	Design	Design and mitigation program finalized and permitting completed.	$2,000,000	First year construction (setback dike and interior restoration elements)	$2,300,000	Second year construction	$5,700,000	$10,000,000	1/1/2012	Snohomish County of	$10,000,000	$5,500,000	SRFB, ESRP, local
Bigelow Creek Rechannelization and Enhancement	Implementation	Permitting	$0	construction	$5,000,000	maintenance	$0	$5,000,000	12/31/2012	City of Everett	$5,000,000		
Quilceda Estuary Restoration Hibulb Natural History Preserve	Design	Feasibility and Design	$70,000	Construction	$750,000	maintenance		$820,000	12/31/2015	Tulalip Tribes	$820,000		
North Ebey and Mid-Spencer Islands Breach Enhancements	Design	Design and permitting	$45,000	Construction	$475,000	maintenance		$520,000	12/31/2012	Snohomish County of	$520,000	$475,000	Snohomish Estuary Pacific Treaty Funds
Everett Riverfront North Wetland Complex	Design	Design and permitting	$70,000.00	Construction	$950,000	Construction	$950,000	$1,970,000	12/31/2015	City of Everett	$2,004,048		
Assess and improve mainstem channel habitat connectivity	Monitoring, Construction Completed			Assessment and design	$150,000			$150,000	12/31/2012	Snohomish County of	$150,000		
Raging River Upper Preston Reach Acquisitions	Conceptual	Acquisition	$500,000	N/A	$0			$500,000	12/31/2011	King County DNRP	$500,000		
Tolt River Focus Area 5 Protection	Assessment	Acquisition	$250,000	Acquisition	$325,000	feasibility/design elements for future levee setback	$250,000	$825,000	12/31/2015	King County DNRP	$825,000		
Lower Skykomish River Restoration Assessment and Design	Conceptual	Design and permitting for 3 projects	$150,000	Construction	$1,310,000			$1,460,000	12/31/2015	Snohomish County of	$80,000		
Tychman Slough Assessment and Design	Design	Produce 30% design on one restoration project, complete assessment report		Design	100,000	Construction	$250,000	$350,000	12/31/2012	Stilly Snohomish Fisheries Enhancement Task Force	$350,000	$100,000	

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-MPR-300	Habitat Restoration	Mainstem Primary Restoration	Pilchuck River Assessment and Project Design	Identify processes at the reach level and prioritize in-stream construction projects that have the highest potential for successful rehabilitation of salmonid habitat.	1	Most pressing need	Design needed	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-302	Habitat Restoration	Mainstem Primary Restoration	Stillwater Floodplain Restoration - Construction	Project actions include the removal of bank armament, the reconstruction of shoreline edge habitat with LWD installations and plantings, and potentially the construction of 1 engineered log jam.	1	Most pressing need	Snohomish River Basin Mainstem: Restored Edge: Removal of armoring/levee within 5 meters of the ordinary high water mark (LC) (1500-2500 feet Feet)	Chinook	Cutthroat, Chum, Coho, Sockeye, Pink, Bull Trout, Steelhead
07-MPR-303	Habitat Restoration	Mainstem Primary Restoration	Cherry Creek Mouth Reach and Snoqualmie River Bank	Stabilize and enhance ecological functions of both banks of Cherry Creek west of SR 203.	1	Most pressing need	Activity Type - Instream: Large Woody Debris (Feet), Activity Type - Instream: Channel Reconfiguration (Includes Channel Roughening) (Miles), Activity Type - Sediment Reduction: Sediment Control (Each), Activity Type - Floodplain Restoration: Site Maintenance - Floodplain Restoration (Miles)	Chinook	bald eagle, bull trout, chum, coho, cutthroat, steelhead
07-MPR-304	Habitat Restoration	Mainstem Primary Restoration	Pilchuck River Riparian Restoration and Fish Habitat Enhancement (multiple projects)	Cooperate with private and agricultural landowners to construct large wood structures within the Pilchuck River in areas of accelerated bank erosion, plant native trees to establish buffers, and exclude livestock from buffers. The main benefit to landowners is the reduction of potential flood impact to their land.	1	Most pressing need		Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-305	Habitat - protection and restoration	Mainstem Primary Restoration and Acquisition	Snoqualmie Fall City Reach Reconnection	5280 ft. edge, 5 ac. Off-channel, 12 ac. Riparian	1	Most pressing need	Activity Type - Estuarine & Nearshore: Channel modification / creation (5280 Yards), Activity Type - Estuarine & Nearshore: Hydrological manipulation (5 Acres), Activity Type - Riparian Habitat: Planting (12 Acres), Snohomish River Basin Mainstem: Restored Edge: Removal of armoring/levee within 5 meters of the	Chinook	Cutthroat, Coho, Steelhead
07-MPR-306	Habitat Restoration	Mainstem Primary Restoration	Skykomish Braided Reach Restoration Phase I	Implement a suite of projects (flood fencing, apex jam augmentation, and riparian plantings) to improve salmonid refuge and side channel habitat along the Skykomish River, from Gold Bar to three miles downstream, through the restoration of dysfunctional reach processes, (gravel aggradation and scour, woody debris recruitment, and side channel abandonment).	1	Most pressing need	Activity Type - Channel reconfiguration and connectivity (2000 Feet)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Pilchuck River Assessment and Project Design	Conceptual	Assessment	$268,950	Assessment and design	TBD	Assessment and design	TBD	TBD	12/31/2012	Snohomish County of	$2,100,000		
Stillwater Floodplain Restoration - Construction	Implementation	Construction	$650,000	N/A	$0	N/A	0	$650,000	12/29/2011	Wild Fish Conservancy	$650,000		
Cherry Creek Mouth Reach and Snoqualmie River Bank	Conceptual	Design	$60,000	Uknown		Uknown		$60,000	12/31/2013	WDFW, DU, Private Landowner			
Pilchuck River Riparian Restoration and Fish Habitat Enhancement (multiple projects)	Implementation	Construction, Monitoring	$110,500	Construction, monitoring, maintenance	$55,500			$166,000	12/31/2013	Stilly Snohomish Fisheries Enhancement Task Force	$240,000	$240,000	SRFB, SSTF
Snoqualmie Fall City Reach Reconnection	Assessment	Feasibility	$150,000	Design	$100,000			$250,000	12/31/2012	King County DNRP	$4,000,000		
Skykomish Braided Reach Restoration Phase I	Implementation	Construction	$300,000	Construction	$300,000	monitoring and maintenance		$600,000	12/30/2011	Snohomish County of	$300,000	$155,000	SRFB, SC

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-MPR-307	Habitat Restoration	Mainstem Primary Restoration	Skykomish Braided Reach Restoration Phase II	Design and implement a suite of projects, (e.g., wood complexes and flood fences) to increase edge habitat on the mainstem Skykomish, reconnect side channels, improve riparian conditions and create pools.	1	Most pressing need	Activity Type - Instream Habitat: Channel structure - Off-channel habitat (350 Feet), Activity Type - Instream Habitat: Channel structure - Wood structure / log jam (7 Feet)	Chinook	Chum, Coho, Bull Trout, Steelhead, Peregrine Falcon
07-MPR-311	Habitat Restoration	Mainstem Primary Restoration	Lower Tolt River Floodplain Reconnection	The Lower Tolt River Floodplain Reconnection Project will restore connectivity between the Tolt River and 48 acres of floodplain habitat on County-owned land.	1a	Most pressing need	Activity Type - Estuarine & Nearshore: Channel modification / creation (2500 Yardst), Activity Type - Estuarine & Nearshore: Hydrological manipulation (12 Acres), Activity Type - Riparian Habitat: Planting (6 Acres)	Chinook	Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-312	Habitat Protection	Acquisition - Mainstem Primary Restoration	Tolt River Habitat Acquisitions (City of Carnation)	Acquire and protect from future development riparian areas on the Lower Tolt River mainstem containing significant in-stream habitat value for Chinook salmon.	1	Most pressing need	Snohomish River Basin Mainstem: Restored Edge: Acquisition in the Mainstem Sub-basin Strategy Groups (LC) (5 Acres)	Chinook	Coho (Secondary Species), Steelhead (Secondary Species)
07-MPR-320	Habitat - protection and restoration	Mainstem Primary Restoration and Acquisition	Chinook Bend Levee Removal	Levee setback to create 5 acres off-channel habitat, and 2,000 ft. edge enhancements. Project includes a 2 acres acquisition at Camp Corey to allow for work downstream of the revetment removal.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Channel modification / creation (2000 Yardst), Activity Type - Estuarine & Nearshore: Hydrological manipulation (5 Acres), Activity Types - Acquisition/Easements/Leases : Wetland areas protected (2 Acres),	Chinook	Cutthroat, Coho, Steelhead
07-MPR-321	Habitat Restoration	Mainstem Primary Restoration	McElhoe-Person Levee Setback	Levee setback to restore 2500 ft. of edge habitat, 2.5 acers off-channel habitat, and 2 acres riparian vegetation.	1	Most pressing need	Activity Type - Estuarine & Nearshore: Channel modification / creation (2500 Yardst), Activity Type - Estuarine & Nearshore: Hydrological manipulation (2.50 Acres), Activity Type - Riparian Habitat: Planting (2 Acres), Snohomish River Basin Mainstem:	Chinook	Cutthroat, Coho, Steelhead
07-MPR-323	Habitat Restoration	Mainstem Primary Restoration	French Creek Basin Feasibility Study, Fish Passage/Restoration	Conduct a feasibility study to investigate the extent to which access and rearing habitat for Chinook salmon can be restored, how well water quality problems in French Slough can be addressed, and the extent to which habitat restoration can be accomplished.	1	Most pressing need	Juvenile fish passage	Chinook	Coho
07-MPR-338	Habitat - protection and restoration	Mainstem Primary Restoration and Acquisition	Everett Marshland Tidal Wetland Restoration	Restore over 400 acres of diked land to tidally-influenced wetland that will connect to the Snohomish River through Lowell- Snohomish River Road.	1	Most pressing need		Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-039	Habitat Restoration	Mainstem Primary Restoration	Weiss Creek (Lower) Restoration Project Maintenance - Phase 2	Maintain an existing habitat restoration project, installed in 1999.	1	Pressing need	more detailed description of proposed work		
07-MPR-049	Habitat Restoration	Mainstem Primary Restoration	Buck Island Floodplain Forest Project	Located in Monroe at the confluence of Woods Creek and the Skykomish River, this project will address a lack of canopy diversity, erosion at the downstream toe of the island, and suppression of invasive species, namely blackberry & knotweed.	1	Pressing need	Activity Type - Riparian Habitat: Plant removal/ control (1 Acres)	Pink	
07-MPR-119	Habitat Restoration	Mainstem Primary Restoration	Raging River Kerriston Reach Restoration	Placing large woody debris in the channel and floodplain as well as 15 acres of riparian enhancement.	2	Pressing need	Activity Type - Riparian Habitat: Planting (15 Acres), Snohomish River Basin Mainstem: Restored Riparian Habitat: Riparian planting (LC) (15 Acres)	Steelhead	Coho

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Skykomish Braided Reach Restoration Phase II	Design	Design/Permitting	$350,000	Construction	$0	Construction	$0	$350,000	12/31/2012	Snohomish County of	$350,000	$350,000	SRFB, SC
Lower Tolt River Floodplain Reconnection	Monitoring, Construction Completed	Monitoring and Maintenance		Monitoring and Maintenance		Monitoring and Maintenance			10/1/2009	Seattle City of, King County DNRP	$4,094,601	1000000	SRFB
Tolt River Habitat Acquisitions (City of Carnation)	Assessment	acquisition	$50,000	Acquisition	$100,000	acquisition	$200,000	$350,000	12/31/2012	Seattle City Light	$400,000		
Chinook Bend Levee Removal	Implementation	Construction	$600,000	Maintenance & Monitoring	$90,000			$690,000	12/31/2011	King County DNRP	$890,000		
McElhoe-Person Levee Setback	Implementation	Construction	$768,000	Maintenance & Monitoring	$50,000			$818,000	12/31/2012	King County DNRP	$918,000		
French Creek Basin Feasibility Study, Fish Passage/Restoration	Assessment	Partner Developments	$43,720	Partner Development, Feasibility Analysis	$100,000	Design	$100,000	$243,720	12/30/2020	Sustainable Fisheries Foundation, Ducks Unlimited	$10,000,000		
Everett Marshland Tidal Wetland Restoration	Design							$0	1/1/2020	City of Everett	$62,283,340		
Weiss Creek (Lower) Restoration Project Maintenance - Phase 2	Maintenance			Maintenance	$15,000			$15,000	12/31/2012		$15,000		
Buck Island Floodplain Forest Project	Implementation	Control 1.0 acres invasives	$2,500	Control 1.0 acres invasives	$2,500	Control 1.0 acres inv	$2,500	$7,500	6/30/2005	Stilly Snohomish Fisheries Enhancement Task Force	$30,000		
Raging River Kerriston Reach Restoration	Implementation	Construction	$100,000	Construction	$100,000	N/A	$0	$200,000	12/31/2011	King County DNRP	$200,000	$100,000	KC

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-MPR-176	Habitat Restoration	Mainstem Primary Restoration	Snohomish Estuary Edge Enhancement Phase II	Restore 1 acre tidal marsh and install another 20 log jams.	1	Pressing need		Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-182	Habitat Restoration	Mainstem Primary Restoration	Stillwater Floodplain Restoration - Riparian	Mainstem-primary - Stillwater Floodplain Restoration to restore 25 ac riparian habitat	1	Pressing need	Activity Type - Riparian Habitat: Planting (25 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-183	Habitat Restoration	Mainstem Primary Restoration	People's Creek Riparian	Dike setback, LWD placement and riparian enhancement	2	Pressing need		Coho	Cutthroat, Chinook, Chum, Steelhead
07-MPR-190	Habitat Restoration	Mainstem Primary Restoration	Tolt River Riparian Restoration & Invasive Removal (RM 1.7-2.0)	Remove nonnative species from the riparian area and replanted with native conifers, hardwoods, and shrubs that are currently represented on portions of the property. Community outreach will occur to neighbors and with local schools in addition to volunter planting events. RM 1.7-2.0	1	Pressing need	Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Riparian planting (LC) (2 Acres)	Chinook	Coho, Steelhead
07-MPR-214	Habitat Restoration	Mainstem Primary Restoration	Fern Bluff Levee Enhancement.	Acquisition; increase flow in off channel slough behind levee; enhance tributary	1	Pressing need	Design needed	Chinook	Cutthroat, Coho
07-MPR-216	Habitat Restoration	Mainstem Primary Restoration	Raging River Knotweed Control and Revegetation	Treat approx. 30 acres knotweed infested sites and replant appropriate areas.	1	Pressing need	Activity Type - Riparian Habitat: Plant removal/ control (30 Acres)	Cutthroat	Cutthroat, Coho, Steelhead
07-MPR-217	Habitat - protection and restoration	Mainstem Primary Restoration and Acquisition	Upper Raging River Protection and Restoration	To protect and restore 7000 acres of instream, riparian, and upland habitat	1	Pressing need	Activity Types - Acquisition/Easements/Leases : Wetland areas protected (7000 Acres)	Chinook	Cutthroat, Coho, Steelhead
07-MPR-301	Habitat Restoration	Mainstem Primary Restoration	Tolt River Riparian Restoration & Invasive Removal (RM 3.7-4.2 & 4.95-5)	Control nonnative species in the riparian area and replanted with native conifers, hardwoods, and shrubs that are currently represented on the properties. A 3 acre work area has been identified on portions of SCL properties, located at approximately RM 3.7-4.2 and RM 4.89-5	1	Pressing need	Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Riparian planting (LC) (3 Acres)	Chinook	Coho, Steelhead
07-MPR-308	Habitat Restoration	Mainstem Primary Restoration	Snoqualmie Riparian Restoration with Salmon-Safe Farms	Stewardship Partners will conduct riparian restoration with agricultural landowners along 2.8 miles of the Snoqualmie River to assist farmers in achieving and maintaining “Salmon-Safe” certification, an emerging Northwest labeling program that recognizes fish-friendly farming practices in the marketplace (multiple	1	Pressing need		Chinook	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Snohomish Estuary Edge Enhancement Phase II	Conceptual	Monitoring (Phase 1)	$0	Permitting	$250,000	Construction	$0	$250,000	12/31/2012	Snohomish County of	$250,000		
Stillwater Floodplain Restoration - Riparian	Implementation	Plant 10 ac riparian; maintain 20 ac. Riparian	$20,000	Plant 5 ac riparian; maintain 25 ac. Riparian	$15,000	Maintain 25 ac. Riparian	$8,000	$43,000	12/31/2012	Stilly Snohomish Fisheries Enhancement Task Force	$100,000		
People's Creek Riparian	Design	Design and permitting	$50,000	Construction	$20,000			$70,000	12/31/2012	Snohomish Conservation District, Stewardship Partners	$215,000		
Tolt River Riparian Restoration & Invasive Removal (RM 1.7-2.0)	Implementation	Invasive treatment and/or removal and additional planting	$16,521	Ongoing monitoring	$1,000			$17,521	9/30/2010	Seattle City Light	$61,521		
Fern Bluff Levee Enhancement.	Assessment	Concept development	$0	Acquisition	$300,000	Design and construction	$500,000	$800,000	12/31/2012	Fish & Wildlife Dept of	$800,000		
Raging River Knotweed Control and Revegetation	Implementation	Control	$40,000	Monitoring and Maintenance	$20,000			$60,000	12/31/2012	Mountains to Sound Greenway Trust	$100,000		
Upper Raging River Protection and Restoration	Assessment	Acquisition	$1,500,000	Design	$50,000	Construction	$350,000	$1,900,000	12/31/2012	Cascade Land Conservancy, WA Dept. of Natural Resources ,	$1,900,000		
Tolt River Riparian Restoration & Invasive Removal (RM 3.7-4.2 & 4.95-5)	Implementation	invasives removal and replanting	$35,000	Invasive treatment and/or removal and additional planting	$25,000	invasive treatment and/or removal and additional planting as needed	$12,185	$72,185	12/31/2012	Seattle City Light	$72,185	$32,185	
Snoqualmie Riparian Restoration with Salmon-Safe Farms	Implementation	Outreach, Construction, and Maintenance	$208,633	Outreach, Construction, and Maintenance	$208,633	Outreach, construction and maintenance	$208,633	$625,900	12/31/2013	Stewardship Partners	$625,900	$319,960	SRFB, SP

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-MPR-313	Habitat Restoration	Mainstem Primary Restoration	Lower Snoqualmie Restoration - Duvall Reach Riparian Awareness	Enhance degraded floodplain riparian habitat conditions along a one-mile section of the lower Snoqualmie River on public land owned by the City of Duvall.	1	Pressing need		Chum, Chinook, Coho, Steelhead, Pink	
07-MPR-315	Habitat Restoration	Mainstem Primary Restoration	Cherry Valley Stream Restoration	Remeandering Cherry creek through WDFW property and connecting with WFC project. Substantial riparian planting.	1	Pressing need		Chum, Chinook, Coho, Bull Trout, Steelhead	Bald Eagle
07-MPR-316	Habitat Restoration	Mainstem Primary Restoration	City of Sultan Culvert Assessment and Outreach	The proposed project will benefit salmon habitat conservation by forming a creative partnership with the City of Sultan to identify fish habitat barriers located largely within in their jurisdiction.	2	Pressing need	1 culvert?		
07-MPR-322	Habitat Restoration	Mainstem Primary Restoration	Snoqualmie Riparian Restoration	Mainstem Primary - Snoqualmie Riparian Restoration on Agriculture Lands to restore 10 acres riparian habitat.	1	Pressing need	Activity Type - Riparian Habitat: Planting (10 Acres), Snohomish River Basin Mainstem: Restored Riparian Habitat: Riparian planting (LC) (10 Acres)	Chinook	Cutthroat, Coho, Steelhead
07-MPR-324	Habitat Restoration	Mainstem Primary Restoration	Raging River Tributary Fish Barrier Removal and Stream Habitat Restoration	Remove a fish passage barrier (6-inch culvert) and replace with a passable culvert, and restore 150 feet of natural stream channel.	1	Pressing need		Coho	Cutthroat, Steelhead
07-MPR-325	Habitat Restoration	Mainstem Primary Restoration	Coe Clemmons Creek Restoration Phase 2	Installation of control structures for bank stabalization on Coe Clemmons Creek, a west-flowing tributary to the Snoqualmie River. Improvements to channel stability and sediment transport that will benefit habitat and adjacent slope stability.	1	Pressing need	Activity Type - Riparian Habitat: Planting (2 Acres), Activity Type - Upland Habitat: Erosion control structures (0.20 Each)	Coho	Cutthroat
07-MPR-326	Habitat Restoration	Mainstem Primary Restoration	CC Phase II. Cherry Creek Floodplain Restoration	Reconnect Cherry Creek's intact historic channel, and consolidate three floodplain ditches into a single naturalized stream channel to address compromised habitat conditions in lower Cherry Valley.	1	Pressing need	Snohomish River Basin Mainstem: Restored Off-channel Habitat: Summer off-channel habitat restoration (LC) (15 Acres)	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MPR-328	Habitat Restoration	Mainstem Primary Restoration	Investigation of Low Dissolved Oxygen in the Cherry Creek Floodplain	Characterize the dissolved oxygen, biological oxygen demand, and sediment oxygen demand in three Cherry Valley ditches both before and after they undergo extensive excavation (a funded restoration project).	2	Pressing need	Identification of measures to improce water quality		
07-MPR-363	Habitat Protection	Acquisition - Mainstem Primary Restoration	Maloney Creek Restoration Plan	Design and NEPA for construction of a wetland, sediment detention ponds, and instream restoration	1	Pressing need			
07-MPR-364	Habitat Restoration	Mainstem Primary Restoration	Maloney Creek Restoration I	Maloney Creek Restoration will involve three parts: (1) wetland creation; (2) construction of sediment detention ponds; (3) instream restoration.	1	Pressing need	Activity Type - Floodplain Restoration: Site Maintenance - Floodplain Restoration (0.40 Miles), Activity Type - Instream Habitat: Channel structure - Wood structure / log jam (2000 Feet), Activity Type - Wetlands: Upland wetland creation (1 Acres)	Coho, Steelhead, Rainbow, Cutthroat	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Lower Snoqualmie Restoration - Duvall Reach Riparian Awareness	Maintenance	Maintenance & Monitoring	$5,000	Maintenance & Monitoring	$5,000	Maintenance & Monitoring	$5,000	$15,000	10/1/2008	Stilly Snohomish Fisheries Enhancement Task Force	$82,200		
Cherry Valley Stream Restoration	Design	Final Design, Permitting	$0	Construction	$530,000	Reporting, Monitoring	$35,000	$565,000	12/31/2012	Ducks Unlimited - Vancouver	$615,000		
City of Sultan Culvert Assessment and Outreach	Implementation	Labor and supplies	$70,000	Labor and supplies	$20,000	n/a	$0	$90,000	12/21/2012	Wild Fish Conservancy	$90,000		
Snoqualmie Riparian Restoration	Implementation	Construction	$50,000	Construction	$50,000	N/A	$0	$100,000	12/31/2012	King County DNRP	$100,000		
Raging River Tributary Fish Barrier Removal and Stream Habitat Restoration	Implementation	Construction	$37,400		$0		$0	$37,400	6/1/2013	Tulalip Tribes	$37,400	$4,000	Tulalip Tribes
Coe Clemmons Creek Restoration Phase 2	Design	Design	$10,000	Construction	$12,000	construction	28000	$50,000	10/31/2010	City of Duvall	$50,000	$50,000	KCD
CC Phase II. Cherry Creek Floodplain Restoration	Implementation	Construction / Implementation	$485,000	Construction	$50,000			$535,000	12/31/2013	Wild Fish Conservancy	$543,000	$543,000	SRFB, KCD, KC, NFWF, DU
Investigation of Low Dissolved Oxygen in the Cherry Creek Floodplain	Conceptual	Monitoring/Implementation	$63,710	Monitoring/ Implementation	$63,710	Monitoring/ Implementation	$63,710	$191,130	12/31/2013	Wild Fish Conservancy	$191,130		
Maloney Creek Restoration Plan	Assessment		150000		150000			$300,000	6/15/2011			$300,000	NRDA
Maloney Creek Restoration I	Assessment		200000		200000		100000	$500,000	9/30/2013		$500,000	$500,000	NRDA

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-MPR-365	Habitat Restoration	Mainstem Primary Restoration	Fall City Park Riparian Restoraiton Phase 2	Control invasive plants and restore 9 acres of riparian area at King County's Fall City Park along the Snoqualmie River. Phase 1 was completed in 2010 and phase 2 will extend downstream.	1	Pressing need	Snohomish River Basin Mainstem: Restored Riparian Habitat: Riparian planting (LC) (9 Acres)	Chum, Chinook, Coho, Steelhead, Cutthroat	
07-MPR-366	Habitat Restoration	Mainstem Primary Restoration	South Fork Skykomish Knotweed Control and Riparian Restoration	Treat knotweed infested sites and replant appropriate areas along approxi. Treatment will occur along the river and major tributaries connected to the South Fork Skykomish River. The project will include 3.5 river miles of initial treatment and up to 14 river miles of maintenance retreatment as well as riparian plantings along 3,000	1	Pressing need		Chum, Chinook, Coho, Bull Trout, Steelhead, Cutthroat, Pink	
07-MPR-314	Habitat Restoration	Mainstem Primary Restoration	French Creek Basin Riparian Enhancement	Plant approximately 88 acres of riparian plantings along recently restored French Creek main channel and associated floodplain wetland habitat.	2	Need	Activity Type - Riparian Habitat: Planting (88 Acres)	Chinook, Coho, Bull Trout, Steelhead	
07-MSR-016	Habitat Restoration	Mainstem Secondary Restoration	Kuhlman Creek Culvert Replacement	Replacing two culverts, native plantings and installation of LWD as necessary between along Kuhlman Creek in vicinity of culverts.	2	Pressing need	Activity Type - Fish Passage: Culvert installed (2 Each)	Coho, Kokanee	
07-MSR-019	Habitat Restoration	Mainstem Secondary Restoration	Trout Creek Road Erosion Control	Decommission 2.2 miles of Trout Creek Road (Forest Road 6320) and 3.6 miles of associated spurs in the Trout Creek subwatershed within the North Fork Skykomish River watershed.	1	Pressing need		Bull Trout, Steelhead	Coho
07-RPR-016	Habitat Restoration	Rural Primary Restoration	NF Cherry Creek Restoration	Mainstem Primary - NF Cherry Creek Restoration to protect and enhance 1,300 ft of channel by installing livestock exclusion fencing and planting approx. 4 acres of native riparian corridor along NF Cherry Creek.	2	Pressing need	Activity Type - Riparian Habitat: Fencing (0.60 Miles), Activity Type - Riparian Habitat: Planting (4 Acres)	Coho	Cutthroat, Chum, Pink, Bull Trout, Steelhead
07-RPR-018	Habitat Restoration	Rural Primary Restoration	Cherry Valley Dairy Stream Enhancement	Rural Streams Primary- Cherry Valley Dairy Stream Enhancement to improve 1 acre riparian habitat and remove 1 barrier	2	Pressing need		Coho	Cutthroat, Chinook, Steelhead
07-RPR-022	Habitat Restoration	Rural Primary Restoration	West Fork and Lower Woods Creek Restoration Partnership	The Habitat and Geomorphic Assessment of Woods Creek, currently being conducted by Snohomish County, will identify priority restoration actions for Woods Creek. Several multi-landowner in-stream and riparian projects will result from this prioriziation process and will be completed by Snohomish County and other partners working in the watershed.	2	Pressing need		Chum, Chinook, Coho, Steelhead, Cutthroat, Pink	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Fall City Park Riparian Restoraiton Phase 2	Implementation		90000		90000		90000	$270,000	12/31/2012	Snoqualmie Tribe	$280,000		
South Fork Skykomish Knotweed Control and Riparian Restoration	Assessment							$0	12/31/2013	King County DNR & Parks	$278,500		
French Creek Basin Riparian Enhancement	Implementation	Planting, materials and labor	$180,000	Monitoring, maintenance and replacement	$200,000	Monitoring and Maintenance	$20,000	$400,000	3/31/2010	Ducks Unlimited - Vancouver	$400,000		
Kuhlman Creek Culvert Replacement	Implementation	Construction	$50,000	maintenance	$50,000			$100,000	12/31/2009	Snohomish Conservation District, Snohomish County of	$250,000		
Trout Creek Road Erosion Control	Conceptual		395000					$395,000	10/29/2010	US Forest Service, Sustainable Fisheries Foundation	$395,000		
NF Cherry Creek Restoration	Implementation	Construction	$30,000	Construction	$20,000		$0	$50,000	12/31/2012	Wild Fish Conservancy	$50,000	$50,000	KCD, WFC
Cherry Valley Dairy Stream Enhancement	Implementation	Construction	$90,000	Maintenance	$15,000	Maintenance	$15,000	$120,000	12/31/2007	Stewardship Partners	$120,000		
West Fork and Lower Woods Creek Restoration Partnership	Design	Educate, survey, & project design	$200,000	Project Development, Implementation	$350,000	Complete project installations	$300,000	$850,000	12/31/2013	Snohomish County of	$850,000		

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-RPR-025	Habitat Restoration	Rural Primary Restoration	West Fork and Lower Woods Creek Habitat and Geomorphic Assessment	Snohomish County Surface Water Management (SWM) is conducting a habitat and geomorphic assessment of the West Fork and Lower Woods Creek basin. This comprehensive assessment will include data collection and analysis of channel morphology, floodplain topography, hydrology, hydraulics, riparian conditions, and habitat for salmonids. The results will provide SWM staff and project partners with the information necessary to site and design	2	Pressing need		Chum, Chinook, Coho, Bull Trout, Steelhead, Cutthroat, Pink	
07-RSR-061	Habitat Restoration	Rural Primary Restoration	Patterson Creek Culvert Replacement (s)	Replace, retrofit, and/or remove up to three anthroprogenic barriers in the Patterson Creek basin.	3	Need			
07-RSR-045	Habitat Restoration	Rural Secondary Restoration	Riparian Restoration on farmland - Harris Creek	Livestock exclusion fencing, riparian planting, invasive species removal. Cooperative partnerships with multiple landowners.	3	Pressing need	Activity Type - Riparian Habitat: Planting (5.30 Acres)	Coho	Cutthroat, Chinook, Steelhead
07-RSR-046	Habitat Protection	Acquisition - Rural Secondary Restoration	Grand Ridge Acquisition	Acquire 75 acres on Canyon Creek in the Patterson Creek sub basin	1	Pressing need	Activity Types - Acquisition/Easements/Leases : Wetland areas protected (75 Acres), Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Acquisition (LC) (75 Acres)	Steelhead	Cutthroat (Secondary Species), Coho (Secondary Species)
07-RSR-049	Habitat Protection	Acquisition - Rural Secondary Restoration	Patterson Creek Protection on Stevlingson Property	Work with landowner to protect 10 acres property on the alluvial fan of Patterson. Would include significant floodplain/riparian restoration & structure removal.	3	Pressing need	Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Acquisition (LC) (10 Acres)	Steelhead	Coho (Secondary Species)
07-RSR-050	Habitat Protection	Acquisition - Rural Secondary Restoration	Patterson Creek State DNR Land Acquisition	Work with State DNR to protect 160 acres	1	Pressing need	Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Acquisition (LC) (160 Acres)	Steelhead	Cutthroat (Secondary Species), Coho (Secondary Species)
07-RSR-048	Habitat Restoration	Rural Secondary Restoration	Storybook Creek Stream Enhancement	Partner with landowner to relocate channelized trib restoring 950 feet of this tributary to Patterson Creek and restore 1.4 acres of riparian habitat	3	Need	Activity Type - Instream Habitat: Channel reconfiguration and connectivity (0.20 Miles), Activity Type - Riparian Habitat: Planting (1.40 Acres), Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Riparian planting (LC) (1.40 Acres)	Coho	
07-RSR-051	Habitat Restoration	Rural Secondary Restoration	Harris Creek Barrier Removal and Off-Channel Habitat Restoration	Restore fish access tooff-channel rearing habitat in the Harris Creek watershed by removing a road prism that currently acts as a fish passage barrier.	3	Need	Approximately 0.6 miles (3,200 feet) and 7 acres (304,920-sq, ft.) of ponded wetland and stream channel habitat exists above the barrier and will be made accessible to fish upon completion of the project. Currently a road prism (approximately 360 feet in length) crosses the stream corridor and blocks fish passage.	Coho	Cutthroat, Steelhead
07-USR-039	Habitat Restoration	Urban Streams Restoration	Coho Creek Restoration	Restore and enhance 6,000 feet of stream channel, 8 acres of riparian forest and improve connectivity to adjacent forest communities.	3a	Pressing need		Coho	Cutthroat, Chum

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
West Fork and Lower Woods Creek Habitat and Geomorphic Assessment	Assessment	analysis and project identifiecation	$25,000	design	$0			$25,000	4/30/2010	Snohomish County of	$850,000		
Patterson Creek Culvert Replacement (s)	Conceptual							$0	12/31/2014	Wild Fish Conservancy	$200,000		
Riparian Restoration on farmland - Harris Creek	Implementation	Outreach, Construction,	$40,000	Outreach, Construction,	$50,000		$60,000	$150,000	3/23/2012	Stewardship Partners	$150,000		
Grand Ridge Acquisition	Conceptual	Acquisition	$2,400,000	N/A	$0	N/A	$0	$2,400,000	12/31/2010	King County DNRP	$2,400,000		
Patterson Creek Protection on Stevlingson Property	Assessment	Acquisition	$425,000	N/A	0			$425,000	12/31/2012	King County DNRP	$425,000		
Patterson Creek State DNR Land Acquisition	Conceptual	Acquisition	$2,500,000	N/A	$0			$2,500,000	12/31/2012	King County DNRP	$2,500,000		
Storybook Creek Stream Enhancement	Implementation	Construction	$25,000	N/A	$0	N/A	$0	$25,000	12/31/2010	King County DNRP	$25,000		
Harris Creek Barrier Removal and Off-Channel Habitat Restoration	Implementation	Construction	$45,620	n/a	n/a	n/a	n/a	$45,620	6/1/2013	Tulalip Tribes	$45,620		
Coho Creek Restoration	Implementation	Construction	$1,175,000	n/a	n/a	n/a	n/a	$1,175,000	12/31/2011	Tulalip Tribes	$1,175,000		

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-USR-044	Habitat Restoration	Urban Streams Restoration	Allen Creek Stewardship Project	Landowner outreach to implement water quality and riparian best management practices and conduct instream restoration.	3	Pressing need		Coho	Cutthroat, Chum
07-USR-046	Habitat Restoration	Urban Streams Restoration	Cemetery Creek Restoration Project	Control invasive blackberry along 3 acres of Cemetery Creek near Snohomish and re-plant with native trees and shrubs. (H87 Cemetery Creek - Sustainable Fisheries 08)	3	Pressing need	Activity Type - Riparian Habitat: Planting (3 Acres)	Coho	
07-USR-047	Habitat Restoration	Urban Streams Restoration	Jones Creek Restoration	Restore riparian vegetation along Jones Creek on Marysville School District property.	3	Need	Activity Type - Riparian Habitat: Planting (5 Acres)	Coho	Cutthroat, Steelhead
07-HSR-019	Habitat Protection	Acquisition - Headwaters Secondary Restoration	South Fork Skykomish Acquisitions	Miller, Beckler, Foss, Tye Reach acquisitions	1	Most pressing need	Snohomish River Basin Mainstem: Restored Edge: Acquisition in the Mainstem Sub-basin Strategy Groups (LC) (35 Acres), Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Acquisition (LC) (35 Acres)	Chinook	Cutthroat (Secondary Species), Coho (Secondary Species), Bull Trout
07-HRA-008	Habitat Restoration	Headwaters above Falls and Dam	South Fork Snoqualmie Road Decommissioning	Reduce erosion potential and road density in South Fork Snoqualmie by decommissioning 30 miles of Forest Service roads and converting another 30 miles to trail, removing a total of 60 miles of roads from the Forest Service system.	1	Pressing need	Activity Type - Upland Habitat: Road abandonment and obliteration (48 Miles)	Rainbow, Cutthroat	Bull Trout, Chinook, Coho, Steelhead
07-HRA-009	Habitat Restoration	Headwaters above Falls and Dam	Bessemer Mtn Road Decommissioning	Decommission 11 miles on Bessemer Mtn (North Fork Snoqualmie). The work would mostly be pulling all culverts with some embankment pullback, ripping some of the surface and partially recontouring some of it.	1	Pressing need	Activity Type - Upland Habitat: Road abandonment and obliteration (11 Miles)	Rainbow, Cutthroat	Bull Trout, Chinook, Coho, Steelhead
07-HRA-030	Habitat Restoration	Headwaters above Falls and Dam	Upper Snoqualmie River Knotweed Control and Riparian Restoration	Treat knotweed infested sites and replant appropriate areas along up to 16 river miles on major tributaries in the Upper Snoqualmie Basin. The project will involve 6 river miles of initial treatment and up to 16 river miles of maintenance retreatment along with 6,000 linear feet per year of riparian restoration.	3	Pressing need	need to quanitify in acres	Riparian	Rainbow, Cutthroat
07-HSR-020	Habitat Restoration	Headwaters Secondary Restoration	Harlan Creek Road Obliteration	Obliteration of up to 10 miles of logging roads on steep, unstable slopes adjacent to Harlan Creek, a major salmon-bearing tributary to the Beckler River.	1	Pressing need	Activity Type - Upland Habitat: Road abandonment and obliteration (10 Miles)	Chinook, Coho, Bull Trout, Steelhead	Cutthroat, Chum, Pink
07-HSR-029	Habitat Restoration	Headwaters Secondary Restoration	Alpine Baldy Road Decommissioning - U.S. Forest Service Roads 6066 & 6067	Decommission the following Forest Service road segments: the upper 1.4 miles of FS Rd 6066; the entire 4.6 miles of FS Rd 6067; an additional 1.0 mile of spur roads on FS Rd 6067; the last 2.0 miles of FS Rd 6570 (aka the San Juan Hill road), and the last 1.2 miles of FS Rd 6530 (aka the Rapid River road - which now lies within the newly	1	Pressing need	Activity Type - Upland Habitat: Road abandonment and obliteration (10.20 Miles)	Chinook, Coho, Bull Trout, Steelhead	Cutthroat, Chum, Sockeye, Pink

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Allen Creek Stewardship Project	Implementation			Outreach and implementation	$93,000	Outreach and implementation	$93,000	$186,000	10/31/2012	Adopt A Stream Foundation	$186,000	$186,000	Department of Ecology
Cemetery Creek Restoration Project	Implementation	Clear one acre invasives	$15,000	Plant 1 acre riparian	$25,000	Maintain 2 acres of invasives and plant 1 acre riparian	$20,000	$60,000	12/31/2012	Stilly Snohomish Fisheries Enhancement Task Force	$60,000		
Jones Creek Restoration	Implementation	Construction	$100,000	Monitoring and Maintenance				$100,000	12/1/2011	Stilly Snohomish Fisheries Enhancement Task Force	$200,000		
South Fork Skykomish Acquisitions	Conceptual	Acquisition	$250,000	Acquisition	$250,000			$500,000	12/31/2011	Cascade Land Conservancy, King County DNRP	$500,000		
South Fork Snoqualmie Road Decommissioning	Design	Planning/Environmental Documentation	$11,000	Design Phase I	$100,000	Design Phase II, Begin Construction Phase I	$550,000	$661,000	10/15/2014	Mountains to Sound Greenway Trust, US Forest Service	$1,025,000	$1,194,000	USFS, M2SGT, Recovery Act
Bessemer Mtn Road Decommissioning	Design	Design	$100,000	Construction	$500,000			$600,000	9/30/2011	WA Dept. of Natural Resources , US Forest Service	$600,000		
Upper Snoqualmie River Knotweed Control and Riparian Restoration	Implementation	Implementation	200000	Implementation	200000	Implementation	200000	$600,000	12/31/2013	King County DNR & Parks	$460,000		
Harlan Creek Road Obliteration	Design	Survey and design	$40,000	Planning, permits and contract prep	$155,000			$195,000	10/15/2013	US Forest Service	$600,000	$491,000	USFS, NRDA
Alpine Baldy Road Decommissioning - U.S. Forest Service Roads 6066 & 6067	Design	Surveys for design	$10,000	Planning, permits, design and contract prep	$150,000			$160,000	10/28/2011	US Forest Service, Sustainable Fisheries Foundation	$680,000		

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-HRA-011	Habitat Restoration	Headwaters above Falls and Dam	Anthracite Creek Enhancement and Awareness	Enhance approximately 100 feet of Anthracite Creek on both the left and right banks: 50 feet upstream and downstream of the proposed culvert.	3	Need	Activity Type - Fish Passage: Culvert installed (1 Each), Activity Type - Riparian Habitat: Planting (0.10 Acres)	Steelhead	Cutthroat, Coho, Bull Trout\
07-HRA-029	Habitat Restoration	Headwaters above Falls and Dam	Wetland Enhancement and Community Outreach – North Bend	Enhance aquatic habitat for salmonids in a wetland on private property near North Bend. The wetland lies approximately 1000 feet from and is connected to the SF Snoqualmie River via an unnamed tributary stream.	4	Need	Activity Type - Fish Passage: Culvert installed (1 Each), Activity Type - Riparian Habitat: Planting (1 Acres); 3 public outreach events	Cutthroat	
07-BW-003	Habitat Restoration	Multiple SBSGs	Fish Passage Barrier Prioritization (Phase II)	Expand the number of basins represented on the WRIA-07 BPMS web based mapping system (a web system designed to make prioritizing anthropogenic barriers in WRIA 7 easier and faster for federal, state, and tribal agencies and for local biologist, municipalities, citizen groups and private land owners).	1	Most pressing need	Activity Type - Fish Passage: culvert replacement (10 Each)	Coho	Cutthroat, Chinook, Chum, Bull Trout, Steelhead
07-BW-006	Habitat Restoration	Multiple SBSGs	Skykomish Forks Restoration Plan	Design to at least 30% for multiple instream and riparian restoration projects in North and South Fork Skykomish Rivers and selected tributaries (e.g., Miller River).	1	Most pressing need	30% design		
07-BW-007	Habitat Restoration	Multiple SBSGs	WRIA 07 Water Type and Assessment Project	Through visual and electrofishing surveys, Wild Fish Conservancy (WFC) will determine and correct water type classifications in ~45 watersheds in prioritized portions of WRIA 07 using state-sanctioned protocols.	1	Most pressing need	Survey and correct water type classifications in ~45 watersheds	Chinook	
	Habitat - protection and restoration	Non-Capital: BMP Implementation	Snoqualmie Salmon-Safe Marketing and Promotion	Conduct a targeted Salmon-Safe marketing and promotional campaign that promotes Snoqualmie Valley farms in the Seattle metropolitan area.	1	Pressing need		Chinook	
07-BW-007	Habitat Restoration	Multiple SBSGs	Long-term stewardship of restored areas - monitoring and maintenance.	Provide long-term stewardship (monitoring, maintenance) of restored project sites in the basin.			Monitoring, analysis, reporting, maintenance	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
	Habitat	Fish passage	Passage of adult fish arouond Sunset Falls velocity barrier	Trap and haul adult fish around Sunset Falls to utilize spawing and rearing habitat throughout the South Fork Skykomish system				Chinook, coho steelhead	
07-NC-002	Habitat - protection and restoration	Non-Capital: BMP Implementation	Implement the Targeted Stewardship Model - King County and PRKC	Implement EPA funded Targeted Stewardship grant in Patterson Creek and Raging River subbasin then export to other subbasins			Restoration, outreach, education, technical assistance.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Anthracite Creek Enhancement and Awareness	Implementation	Install one culvert, plant 0.1 acres riparian, place LWD along bank	$46,500	Maintenance & Monitoring	$1,000	Maintenance & Monitoring	1,000	$48,500	12/15/2011	Stilly Snohomish Fisheries Enhancement Task Force	$48,500	$29,500	KCD
Wetland Enhancement and Community Outreach – North Bend	Design							$0	12/30/2011	Stilly Snohomish Fisheries Enhancement Task Force			
Fish Passage Barrier Prioritization (Phase II)	Implementation	GIS support and data entry	$40,000	GIS support and data entry	$40,000			$80,000	7/30/2010	Wild Fish Conservanc	$104,058	$104,058	SRFB, KC, SC, NFWF
Skykomish Forks Restoration Plan	Design	Design	$175,000	Design	$175,000			$350,000	10/1/2011		$350,000	$350,000	NRDA
WRIA 07 Water Type and Assessment Project	Design	Surveys	$150,000	Surveys	$150,000			$300,000	12/31/2014		$109,290	$12,000	Local Governments/NFWF
Snoqualmie Salmon-Safe Marketing and Promotion	Implementation	Outreach	$15,000	Outreach	$15,000	Outreach	$15,000	$45,000	ongoing	Stewardship Partners			
Long-term stewardship of restored areas - monitoring and maintenance.	Implementation	Implementation (includes 6-person crew, crew lead, lead staff)	$290,000	Implementation (includes 6-person crew, crew lead, lead staff)	$290,000	Implementation (includes 6-person crew, crew lead, lead staff)	$290,000	$870,000	Ongoing	All project sponsors	$870,000		
Passage of adult fish arouond Sunset Falls velocity barrier	underway	Trapping and hauling	[NEED FROM WDFW]	Trapping and hauling	[NEED FROM WDFW]	Trapping and hauling	[NEED FROM WDFW]	ongoing		WDFW			WDFW
Implement the Targeted Stewardship Model - King County and PRKC	Implementation	Restoration, outreach, education, technical assistance	$500,000	Restoration, outreach, education, technical assistance	$200,000	Restoration, outreach, education, technical	$200,000	$900,000	Ongoing	KC, Partnership for Rural King County	$900,000		

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-NC-003	Habitat - protection and restoration	Non-Capital: BMP Implementation	Land-use specific stewardship	Provide specific stewardship for key land uses, such as urban areas (LID), forestry and agriculture.			Restoration, outreach, education, technical assistance.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-004	Habitat - protection and restoration	Non-Capital: BMP Implementation	NPDES implementation	Including STORM					
07-NC-005	Habitat - protection and restoration	Non-Capital: BMP Implementation	Provide basin steward staff.	Stewards provide technical assistance, project development, behavior change across the basin. Staffing would be for SC, KC.			Restoration, outreach, education, technical assistance.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-006	Habitat - protection and restoration	Non-Capital: BMP Implementation	Snoqualmie Watershed Water Quality Synthesis Report Implementation	Implement actions from the Water Quality Report including monitoring, restoration and BMP implementation.					
07-NC-007	Habitat - protection and restoration	Non-Capital: BMP Implementation	WSU Extension Beach Watchers Program	Increase capacity for research, restoration and education relating especially to the nearshore, estuarine and marine environments. Provide workshops and engage the Beach Watchers in 1,000 hours of community service.			Outreach and education.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-008	Habitat - protection and restoration	Non-Capital: Outreach for Awareness	Outreach specialist - Tulalip Tribes						
07-NC-009	Habitat Protection	Non-Capital: Incentives	PBRS and landowner current use tax incentives	Assist King County in enrolling landowners in PBRS and other landowner current use tax programs					
07-NC-010	Habitat - protection and restoration	Non-Capital: Outreach for Awareness	Public Beach Naturalist Program and Shore Stewards	WSU Beach waterchers will engage with general visitors and organized school groups at public beaches to increase Puget Sound literacy and reduce visitor impacts.					
07-NC-011	Habitat - protection and restoration	Non-Capital: Outreach for Awareness	Puget Sound Starts Here Campaign	Public awareness and BMP implementation campaign				Not salmon-specific	
07-NC-012	Habitat - protection and restoration	Non-Capital: Outreach for Awareness	School outreach: King County; Snohomish County; Nature Vision Blue Teams, SSTF REYs education program	Raise Awareness among school-aged children			REYs education programork with 4 schools and approximately 450 community members	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Land-use specific stewardship	Implementation	Restoration, outreach, education, technical assistance	$210,000	Restoration, outreach, education, technical assistance	$210,000	Restoration, outreach, education, technical	$210,000	$630,000	Ongoing	SC, KC, Tulalip Tribes, local jurisdictions, SCD, KCD, CLC, WSU	$630,000	$630,000	$630,000
NPDES implementation	Implementation									all local jurisdictions			
Provide basin steward staff.	Implementation	Restoration, outreach, education, technical assistance	$210,000	Restoration, outreach, education, technical assistance	$210,000	Restoration, outreach, education, technical assistance	$210,000	$630,000	Ongoing	SC, KC	$630,000	$630,000	$630,000
Snoqualmie Watershed Water Quality Synthesis Report Implementation	Implementation	Restoration, outreach, education, technical assistance	$50,000	Restoration, outreach, education, technical assistance	$50,000	Restoration, outreach, education, technical assistance	$50,000	$150,000	Ongoing	Snoqualmie Watershed Forum and King County	$150,000		
WSU Extension Beach Watchers Program	Implementation	Implement.	$210,000	Implementation	$70,000	Implementation	$70,000	$350,000	Ongoing	WSU Extension	$350,000	$350,000	$110,000
Outreach specialist - Tulalip Tribes	Implementation									Tulalip Tribes			
PBRS and landowner current use tax incentives	Implementation	Implementation	100000	Implementation	100000	Implementation	100000	300000	Ongoing	King County	300000	King County	
Public Beach Naturalist Program and Shore Stewards	Implementation	Implementation	7000	Implementation	7000	Implementation	7000		Ongoing	WSU extension			
Puget Sound Starts Here Campaign	Implementation												
School outreach: King County; Snohomish County; Nature Vision Blue Teams, SSTF REYs education program	Implementation	Implementation	$90,000	Implementation	$90,000	Implementation	$90,000	$270,000	Ongoing	Stilly-Snohomish Fisheries Enhancement Task Force	$90,000	$90,000	$9,000

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-NC-013	Habitat Protection	Non-Capital: Incentives	Snoqualmie Conservation Strategy	Identify a common conservation vision, map key resources, identify viable funding sources, and evaluate ecosystem services in the Snoqualmie Basin					
07-NC-014	Habitat Protection	Non-Capital: Planning	Habitat Protection Strategy	Develop a protection strategy to address the challenges of development and climate change by conducting a watershed characterization, reach-scale process analysis, working with a stakeholder group to develop a protection vision, and implementing			Strategic, actionable habitat protection plan	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-015	Habitat Protection	Non-Capital: Planning	Skykomish Valley Conservation Projects	Identification of priority large forest land acquisitions, fund acquisitions of forested river front parcel, and identify funding for GIS work to assess smaller priority parcels along the Skykomish River Valley.					
07-NC-016	Habitat - protection and restoration	Non-Capital: Policy	Advocacy / watchdog?	Environmental Priorities Coalition, Clean Water Act / Pollution Enforcement and Education					
07-NC-017	Habitat - protection and restoration	Non-Capital: Policy	Policy work conducted by basin partners?						
07-NC-018	Habitat Protection	Non-Capital: Policy	Shoreline Master Program Updates and Restoration Plans	Assist cities in updating SMP regulations and developing SMP restoration plans					
07-NC-019	Habitat Protection	Non-Capital: Policy	TDR and PDR Development						
07-NC-020	Habitat - protection and restoration	Non-Capital: Social Capital	Cascade Agenda	The addition of a Cascade Agenda Leadership City and the Cascade Agenda Community Stewards Program				Not salmon-specific	
07-NC-021	Habitat - protection and restoration	Non-Capital: Social Capital	General Program Maintenance	Provide staffing capacity for the Snohomish Basin salmon recovery effort				Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-022	Habitat - protection and restoration	Non-Capital: Social Capital	General Program Maintenance	Build skills and knowledge of basin staff and project sponsors: basin workshops, facilitated discussions, tours and a "grant" fund for sponsors to use for specific training.				Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-NC-023	Habitat - protection and restoration	Non-Capital: Social Capital	Information Sharing	Supporting econet and project working group				Not salmon-specific	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Snoqualmie Conservation Strategy	Implementation									Stewardship Partners			
Habitat Protection Strategy	Implementation		$220,000	Implement.	$220,000	Implement.	$220,000	$660,000	Ongoing.	SC, KC, Tulalip Tribes	$869,090	$869,090	EPA
Skykomish Valley Conservation Projects										Cascade Land Conservancy			
Advocacy / watchdog?										People for Puget Sound, Wild Fish Conservancy, Puget Soundkeepers			
Policy work conducted by basin partners?										KC, SC, TT, SCL			
Shoreline Master Program Updates and Restoration Plans	Implementation	Planning	50000	Planning	50000			100000	2011	Cities in WRIA 7	$100,000		Cities, Snoqualmie Watershed Forum and DOE grants
TDR and PDR Development										Cascade Land Conservancy, King County, Snohomish County			
Cascade Agenda										Cascade Land Conservancy			
General Program Maintenance	Implementation	Staffing	300000	Staffing	300000	Staffing	300000	$900,000		Econet Participants…			
General Program Maintenance	Implementation	Technical assistance	Not quantified	Technical assistance	Not quantified	Technical assistance	Not quantified						
Information Sharing										EcoNet, STORM, PWG, TC, PDC, Forum			

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
07-NC-024	Habitat - protection and restoration	Non-Capital: Social Capital	Snohomish County Beach Watchers	Build volunteer capacity on marine, estuarine, and aquatic education, research and restoration in communities through out Snohomish County and Camano Island.					
	Hatchery	Monitoring	Direct assessment of gene flow in chinook	Sample chinook carcasses, determine genotypes in laboratory, and analyze gene flow between populations, among subpopulations and between hatchery and naturally-produced fish				Chinook	
	Harvest, Hatchery	Monitoring	Hatchery escapement monitoring	Sample Wallace and Tulalip Hatcheries for scales, otoliths, and coded-wire tags to assess hatchery contribution rates				Chinook	coho, chum
	Harvest, Hatchery	Monitoring	Natural escapement monitoring	Sample Snohomish natural escapement for scales, otoliths, and coded-wire tags to assess hatchery contribution rates				Chinook	coho, chum
	Hatchery	Broodstock Management	Skykomish chinook broodstock integration					Chinook	
	Hatchery	Marking	Thermal marking of Tulalip hatchery production	Therrmally mark otoliths of Tulalip chinook and coho				Chinook	coho
	Hatchery	Fish Passage	Tokul Creek Fish Passage - Phase 2	[NEED PROJECT INFORMATION FROM WDFW]				Chinook	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Snohomish County Beach Watchers	Implementation	Implementation	90000	Implementation	90000	Implementation	90000		Ongoing	WSU extension			MRC
Direct assessment of gene flow in chinook	underway	Sampling and data analysis	$25,000	Sampling and data analysis	$25,000	Sampling and data analysis	$25,000	$75,000	2015	Tulalip			US Fish and Wildlife Service, Hatchery Reform
Hatchery escapement monitoring	Underway	State and Tribal hatchery sampling	$10,000	State and Tribal hatchery sampling	$10,000	State and Tribal hatchery sampling	$10,000	$30,000	ongoing	Tulalip and WDFW			US Fish and Wildlife Service, WDFW
Natural escapement monitoring	Underway	State and Tribal escapement sampling	$60,000	State and Tribal escapement sampling	$60,000	State and Tribal escapement sampling	$60,000	$180,000	ongoing	Tulalip and WDFW, Sno. PUD			US Fish and Wildlife Service, Hatchery Reform, WDFW, in kind contributions from others
Skykomish chinook broodstock integration	Underway	Collection of NOR broodstock and incorporation into WRH hatchery broodstock	12000	Collection of NOR broodstock and incorporation into WRH hatchery broodstock	12000	Collection of NOR broodstock and incorporation into WRH hatchery broodstock	12000	$36,000	ongoing	WDFW			Hatchery Reform
Thermal marking of Tulalip hatchery production	Underway	Thermal marking during egg incubation	$7,500	Thermal marking during egg incubation	$7,500	Thermal marking during egg incubation	$7,500	$22,500	ongoing	Tulalip			Hatchery Reform
Tokul Creek Fish Passage - Phase 2	Underway								ongoing	WDFW			

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
	Harvest	Regulation/Enforcement	Develop, communicate, and enforce fishing regulations	Convert the results of the annual fishery planning process into regulations and platforms for communicating those (e.g. recreational fishing pamphlet) and disseminate the same. Enforce regulations through on-the-water presence of uniformed officers, sanctions for violations, etc..				Chinook, coho, chum, pink	
	Harvest	Assessment	Estimate exploitation rates, reconstruct run sizes	Analyze information from coast-wide fishery sampling to compute exploitation rates after the fact.				Chinook, coho	
	Harvest	Annual planning	Preseason fishery planning	Develop annual abundance predictions. Use these, plus models of mixed-stock fishery effect to develop fishery regulation package consistent with conservation objectives for multiple stocks. Includes Pacific salmon Commission, Pacific Fishery managemenet Council, North of falcon, and local comanager meetings.				Chinook, coho, steelhead, chum, pink	
	Harvest, Hatchery	Marking	Adipose fin removal	Remove adipose fins from chinook and coho at Tulalip hatchery before release				Chinook, coho	

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Develop, communicate, and enforce fishing regulations	ongoing	Convert the results of the annual fishery planning process into regulations and platforms for communicating those (e.g. recreational fishing pamphlet) and disseminate the same. Enforce regulations through on-the-water presence of uniformed officers, sanctions for violations, etc..	Hard to tally up all components of this.	Convert the results of the annual fishery planning process into regulations and platforms for communicating those (e.g. recreational fishing pamphlet) and disseminate the same. Enforce regulations through on-the-water presence of uniformed officers, sanctions for violations, etc..	Hard to tally up all components of this.	Convert the results of the annual fishery planning process into regulations and platforms for communicating those (e.g. recreational fishing pamphlet) and disseminate the same. Enforce regulations through on-the-water presence of uniformed officers, sanctions for violations, etc..	Hard to tally up all components of this.	ongoing		WDFW, Tulalip	Hard to tally up all components of this.		WDFW, Tulalip, federal grants
Estimate exploitation rates, reconstruct run sizes	ongoing	Assemble CWT data into coast-wide database. Use these, plus information on the amount of fish harvested and escapement to estimate exploitation rates. Where there are mark-selective fisheries also need to use methods developed for double-index CWT analysis.	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	Assemble CWT data into coast-wide database. Use these, plus information on the amount of fish harvested and escapement to estimate exploitation rates. Where there are mark-selective fisheries also need to use methods developed for double-index CWT analysis.	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	Assemble CWT data into coast-wide database. Use these, plus information on the amount of fish harvested and escapement to estimate exploitation rates. Where there are mark-selective fisheries also need to use methods developed for double-index CWT analysis.	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	ongoing		WDFW, Tulalip	Difficult to compute		Tulalip, WDFW, Hatchery reform projects, NOAA
Preseason fishery planning	underway	Annual planning	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	Annual planning	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	Annual planning	Very difficult to compute enire amount for west coast planning or to separate portion attributable to Snohomish chinook	ongoing		WDFW, Tulalip	Difficult to compute		Multiple
Adipose fin removal	underway	Adipose fin removal	$60,000	Adipose fin removal	$60,000	Adipose fin removal	$60,000	$180,000	ongoing	Tulalip			WDFW

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
	Habitat, Hatchery	Monitoring	Assessment of ecological interactions between hatchery and wild fish	Sample estuary habitats to monitor presence, size and growth rates of hatchery and wild fish to assess interactions				Chinook, coho, steelhead	
	Harvest, Hatchery	Marking	Coded-wire tagging	Acquire and apply 100,000 CWTs to chinook and 50,000 CWTs to coho at Tulalip Hatchery				Chinook, coho	
	Harvest, Hatchery	Mionitoring	Fishery monitoring	Sample tribal harvest for scales, oroltihs, and coded-wire tags to assess hatchery contribution, age distribution, exploitation rates, size of fish caught, etc.				Chinook	coho, chum
	Harvest, Hatchery	Monitoring	Recreational fishery monitoring	Sample recreational harvest for coded-wire tags to assess hatchery contribution and exploitation rate s				Chinook, coho	
	Harvest, Hatchery	Monitoring	Selective fishery monitoring	Sample selective fisheries in areas 8-2 and Skykomish river to estimate harvest and encounters				Chinook	
07-NC-025	H-integration	Basin Planning	Develop Steelhead Recovery Plan with NOAA.	Work with NOAA to develop the local input, local site and project selection and prioritization for the Steelhead Recovery Plan.			Recovery planning.	Steelhead	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MON-01	H-integration	Validation Monitoring	Baseline monitoring of Juvenile Fish Use of Nearshore and Coastal Streams	Continue coordinated monitoring of juvenile fish use of nearshore and coastal streams.			Monitoring - develop monitoring plan.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MON-02	H-integration	Status and Trend Monitoring	Monitoring Fish (Smolt Traps)	Continue coordinated monitoring of fish in the basin, particularly monitoring juvenile fish using the smolt traps on the Skykomish and Snoqualmie Rivers.			Monitoring - develop monitoring plan.	Chinook	Cutthroat, Chum, Coho, Pink, Bull Trout, Steelhead
07-MON-03	H-integration	Validation Monitoring	Whidbey Basin Juvenile Salmon Origins	Genetic identification of distribution of stocks using Whidgey Basin reaches.					
07-MON-04	H-integration	Validation Monitoring	Whidbey Basin Nearshore Marine Juvenile Salmonid Distribution	Assessment of distribution of outmigrating fish					
	H-integration	Monitoring	Estimate magnitude and spatial distribution of natural spawning escapement	Assess spawner escapement throughout the system using a combination of foot, boat, and aerial surveys and application of standard methods.				Chinook, coho steelhead, chum, pink	
	H-integration	Monitoring	Juvenile outmigrant assessment	Assess abundance and timing of juenile outmigrants in the lower Skykomish and Snoqualmie Rivers				Chinook, coho, steelhead	

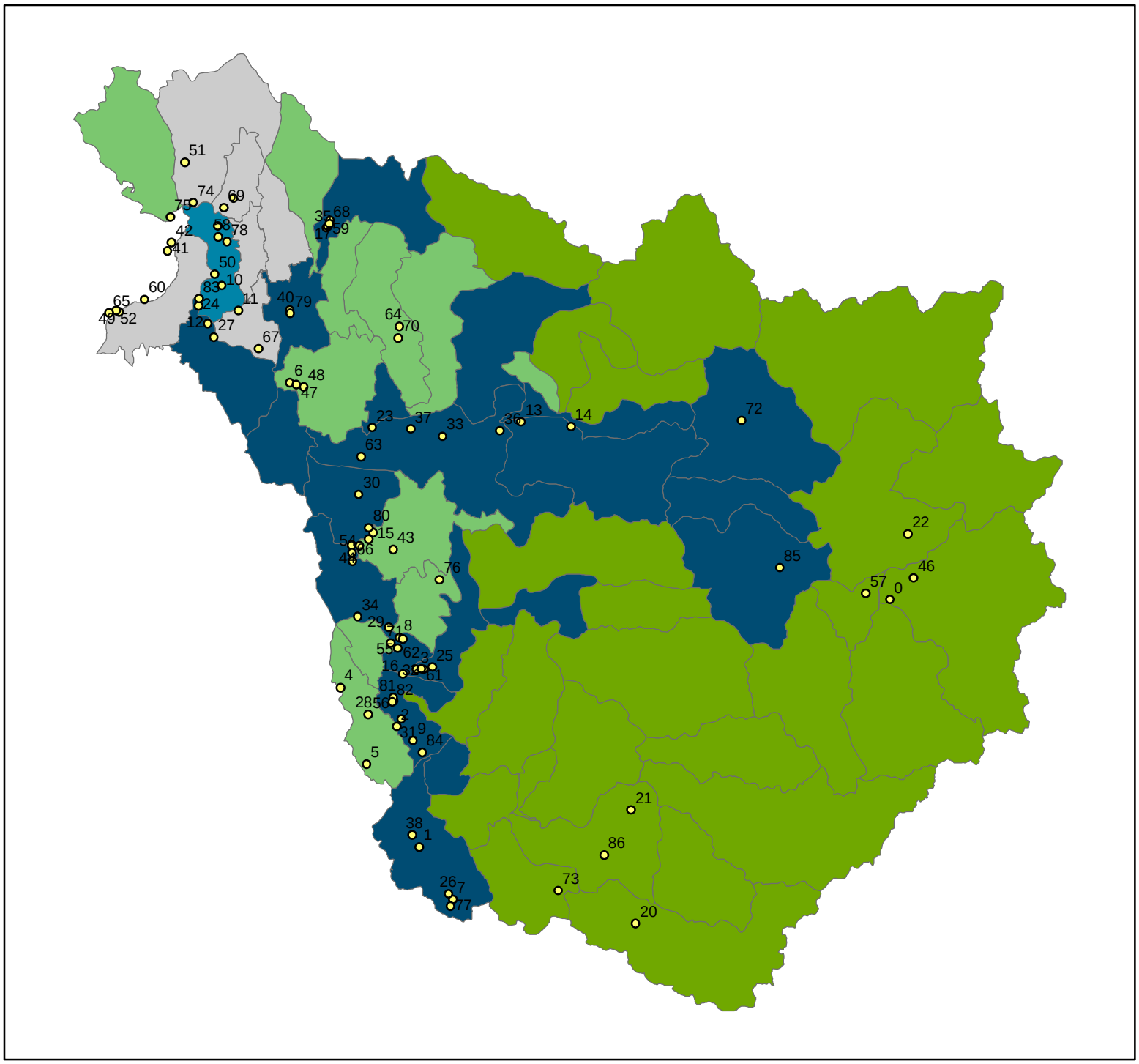
Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Assessment of ecological interactions between hatchery and wild fish	underway	Sampling and data analysis	$150,000	Sampling and data analysis	$150,000	Sampling and data analysis	$150,000	$450,000	ongoing	Tulalip			Coastal salmon recoevery grant
Coded-wire tagging	underway	Tagging	$40,000	Tagging	$40,000	Tagging	$40,000	$120,000	ongoing	Tulalip			Pacific Salmon Treaty Implementation, Hatchery Reform
Fishery monitoring	Underway	Tribal fishery sampling	$60,000	Tribal fishery sampling	$60,000	Tribal fishery sampling	$60,000	$180,000	ongoing	Tulalip			Pacific Salmon Treaty Implementation Funds, Hatchery Reform
Recreational fishery monitoring	Underway	base recreational fishery sampling	[MAY BE ABLE TO GET THIS FROM WDFW]	base recreational fishery sampling	[MAY BE ABLE TO GET THIS FROM WDFW]	base recreational fishery sampling	[MAY BE ABLE TO GET THIS FROM WDFW]	ONGOING		WDFW	[MAY BE ABLE TO GET THIS FROM WDFW]		WDFW
Selective fishery monitoring	Underway	Selective fishery sampling	[WDFW SHOULD BE ABLE TO PROVIDE]	Selective fishery sampling	[WDFW SHOULD BE ABLE TO PROVIDE]	Selective fishery sampling	[WDFW SHOULD BE ABLE TO PROVIDE]	Unclear at this time.		WDFW			[WDFW SHOULD BE ABLE TO PROVIDE]
Develop Steelhead Recovery Plan with NOAA.	Under development	Recovery plan development.	$50,000	N/a	$0	N/a	$0	$50,000	2010	NOAA with Tulalip Tribes, WDFW, SC, KC	$48,750	$48,750	$48,750
Baseline monitoring of Juvenile Fish Use of Nearshore and Coastal Streams	Implementation	Implementation	$60,000	Implementation	$60,000	Implementation	$60,000	$180,000	12/31/2012	Tulalip Tribes	$180,000	$180,000	$60,000
Monitoring Fish (Smolt Traps)	Implementation	Implementation	$250,000	Implementation	$250,000	Implementation	$250,000	$750,000	ongoing	Tulalip Tribes	$750,000	$750,000	$250,000
Whidbey Basin Juvenile Salmon Origins													
Whidbey Basin Nearshore Marine Juvenile Salmonid Distribution													
Estimate magnitude and spatial distribution of natural spawning escapement	underway	Natural escapement surveys and data analysis	[NEED FROM WDFW]	Natural escapement surveys and data analysis	[NEED FROM WDFW]	Natural escapement surveys and data analysis	[NEED FROM WDFW]		ongoing	WDFW			WDFW, in kind contributions from others
Juvenile outmigrant assessment	underway	Sampling and data analysis	$150,000	Sampling and data analysis	$150,000	Sampling and data analysis	$150,000	ongoing		Tulalip			Coastal salmon recoevery grant

Project ID	Plan Category - Level 1	Plan Category - Level 2	Project Name	Project Description	Plan Tier	Sequence Rank	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting
	H-integration	Monitoring	Tulalip Stock Assessment Laboratory	Read otoliths and scales to determine age and origin of fish sampled in fisheries, and escapement				Chinook	coho. Chum

Project Name	Current Project Status	2010 Activity to be funded	2010 Estimated Budget	2011 Activity to be funded	2011 Estimated Budget	2012 Activity to be funded	2012 Estimated Budget	Identified 3 Year Cost	Likely End Date	Likely Sponsor	Total Cost of Project	Known Funding secured	Source of funds (PSAR, SRFB, other)
Tulalip Stock Assessment Laboratory	Underway, Seeking expansion to CWT reading in	Read scales and otoliths	$25,000	Read scales and otoliths	$75,000	Read scales and otoliths	$75,000	$175,000	ongoing	Tulalip			Hatchery Reform, (expansion to CWT reading depends on new funds to be

Projects Removed in 2010

Project ID	Project Name	Reason Removed	Project Description	Priority Tier	Activity Type and Project Performance	3 year cost	Total Project Cost
07-BW-001	Fish passage improvements within drainage and flood control districts		Improve drainage or replace tide gates at 2 drainage districts.	1	Activity Type - Estuary or Nearshore: Tidegate Alteration/Removal (Each)	$300,000	$600,000
07-MPR-079	Stream Enhancement at Lower Deer Creek	Need for further prioritization	Relocate a small tributary to the Snoqualmie River away from a road and structure improving habitat complexity of channel. The project will restore 1 acre of riparian habitat and 400 ft edge habitat restoration.	2	Activity Type - Instream: Channel Reconfiguration (Includes Channel Roughening) (0.08 Miles), Activity Type - Riparian: Revegetation Planting (1 Acres), Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Riparian planting (1)	$150,000	$300,000
07-MPR-309	Fall City Park Planting Phase 1	Complete	Remove invasives (non-native blackberry and invasive knotweed) and plant 2 acres with trees, (cottonwood, red alder and conifers).	1	Activity Type - Riparian Habitat: Plant removal/ control (2 Acres), Activity Type - Riparian Habitat: Planting (2 Acres), Snohomish River Basin Mainstem: Restored Riparian Habitat: Riparian	$90,000	$90,000
07-MPR-310	Weiss Creek (Lower) Restoration Project Maintenance	Complete	Maintain an existing habitat restoration project, installed in 1999, by controlling non-native vegetation, reapplying rodent guards, and repairing a livestock exclusion fence		Activity Type - Invasive Plant Removal; Riparian Restoration (Plantings).	$12,200	$32,200
07-MPR-317	East Fork Weiss Creek Fish Passage Improvement	Need for further prioritization	Replace the perched culvert that is a barrier to fish passage on the East Fork of Weiss Creek.	3	Activity Type - Fish Passage: Culvert Replacement -Fish Passage (1 Each)	$450,000	$450,000
07-MPR-319	Snoqualmie-Tolt Levee Setback	Construction Complete - monitoring and maintenance needs remain	Enhance 2640 ft. edge habitat, restore 12 acres of off-channel and 24 acres riparian vegetation	1	Mainstem restoration: edge habitat, riparian, off-channel	$6,500,000	$6,500,000
07-MSR-017	Richardson Creek Barrier Removal (Mouth)	Change in sponsor priorities	Remove one bridge and raise a second near the mouth of Richardson Creek to improve fish passage to 3.9 miles of salmon spawning and rearing habitat. Install large woody material and riparian vegetation along 830 feet of the channel.	2	Activity Type - Fish Passage: Culvert Removal - Fish Passage (2 Each), Snohomish River Basin Other Sub-basins Restoration: Restored Riparian Habitat: Riparian planting (0.50)	$80,000	$80,000
07-RPR-024	West Fork Woods Creek Harrington Restoration	Addressed under separate project	Restore 500' of WF Woods Creek riparian and in-stream habitat by stabilizing streambank, fencing horses from stream, and planting native plants in riparian area.	2	Activity Type - Riparian: Fencing (1000 Feet), Activity Type - Riparian: Revegetation Planting (1 Acres), Activity Type - Upland Agriculture: Agriculture - Fencing (0.20 Miles)	N/A	N/A
07-RSR-027	NE 52nd Place Culvert removal	Need for further prioritization	Replace a perched culvert that is a barrier to fish passage on upper Patterson Creek.	3	Activity Type - Fish Passage: Culvert Replacement -Fish Passage (1 Each)	$450,000	$450,000
07-RSR-047	Harris Creek Tributary Fish Passage Improvement	Need for further prioritization	Replace a perched culvert that is a barrier to fish passage on a tributary to Harris Creek.	4	Activity Type - Fish Passage: Culvert Replacement -Fish Passage (1 Each)	$200,000	$200,000
07-RSR-052	Carpenter Creek Tributary Fish Passage Improvement	Construction Complete - monitoring and maintenance needs remain	Replace three culverts on private small forest land, that are barriers to Coho and steelhead migration. (H67-WF Woods Cr. - Gerdes)	4	Activity Type - Fish Passage: Rocked ford - road stream crossing (3 Each), Activity Type - Riparian Habitat: Planting (0.10 Acres)	$67,000	$150,000
07-USR-037	Quilceda Creek Culvert Removals (3)	Complete	Remove 3 Quilceda Creek Fish Barrier Culverts	3	Activity Type - Fish Passage: Culvert Replacement -Fish Passage (Each)	$150,000	$150,000
07-USR-040	Quilceda Creek Streamkeepers	Complete	Landowner education on best management practices. LWD installation (100 logs) and riparian enhancement (1 square mile).	3	Activity Type - Instream: Large Woody Debris (1000 Feet), Activity Type - Instream: Streambank Stabilization (0.15 Miles), Activity Type - Riparian: Revegetation Planting (1 Acres), Activity Type - Riparian: Invasives/Weed Control - Riparian (1 Acres)	$240,000	$820,000



Snohomish Basin 3-Year Work Plan Project Map

Legend

Sub-basin Strategy Group

- Estuary
- Headwaters
- Mainstem
- Rural
- Urban

Project Location

0 3.5 7 14

Miles

Snohomish County

PUBLIC WORKS
SURFACE WATER MANAGEMENT
(425) 388-3464

Map ID	HWS ID	Project Name
0	07-HSR-019	South Fork Skykomish Acquisitions
1	07-MPR-072	Raging River Upper Preston Reach Acquisitions
2	07-RSR-049	Patterson Creek Protection on Stevlingson Property
3	07-MPR-312	Tolt River Habitat Acquisitions (City of Carnation)
4	07-RSR-050	Patterson Creek State DNR Land Acquisition
5	07-RSR-046	Grand Ridge Acquisition
6	07-MPR-328	Investigation of Low Dissolved Oxygen in the Cherry Creek Floodplain
7	07-MPR-217	Upper Raging River Protection and Restoration
8	07-MPR-320	Chinook Bend Levee Removal
9	07-MPR-305	Snoqualmie Fall City Reach Reconnection
10	07-ER-033	Ebey Island Feasibility, Acquisition, and Restoration
11	07-ER-035	Diking District 6 Inter-tidal Restoration Project
12	07-MPR-338	Everett Marshland Tidal Wetland Restoration
13	07-MPR-307	Skykomish Braided Reach Restoration Phase II
14	07-MPR-306	Skykomish Braided Reach Restoration Phase I
15	07-MPR-326	CC Phase II. Cherry Creek Floodplain Restoration
16	07-MPR-311	Lower Tolt River Floodplain Reconnection
17	07-MPR-304	Pilchuck River Riparian Restoration and Fish Habitat Enhancement
18	07-MPR-308	Snoqualmie Riparian Restoration with Salmon-Safe Farms
19	07-ER-013	Blue Heron Slough Habitat Conservation Bank
20	07-HRA-008	South Fork Snoqualmie Road Decommissioning
21	07-HRA-009	Bessemer Mtn Road Decommissioning
22	07-HSR-020	Harlan Creek Road Obliteration
23	07-MPR-049	Buck Island Floodplain Forest Project
24	07-ER-038	Bigelow Creek Rechannelization and Enhancement
25	07-MPR-108	Tolt River Focus Area 5 Protection
26	07-MPR-119	Raging River Kerriston Reach Restoration
27	07-MPR-176	Snohomish Estuary Edge Enhancement Phase II
28	07-RSR-048	Storybook Creek Stream Enhancement
29	07-MPR-182	Stillwater Floodplain Restoration - Riparian
30	07-MPR-183	People's Creek Riparian
31	07-MPR-184	Snoqualmie River Nature's Last Stand riparian restoration
32	07-MPR-190	Tolt River Riparian Restoration & Invasive Removal (RM 1.7-2.0)
33	07-MPR-192	Lower Skykomish River Restoration Assessment and Design
34	07-MPR-207	Oxbow Farm wetland enhancement
35	07-MPR-211	Pilchuck River (near Lake Stevens)
36	07-MPR-213	Tychman Slough Assessment and Design

Map ID	HWS ID	Project Name
37	07-MPR-214	Fern Bluff Levee Enhancement.
38	07-MPR-216	Raging River Knotweed Control and Revegetation
39	07-MPR-220	Herb Co. Farm Riparian Restoration
40	07-MSR-016	Kuhlman Creek Culvert Replacement
41	07-NR-003	Jetty Island South Extension Phase II
42	07-NR-005	Renourish Existing Jetty Island Berm
43	07-RPR-016	NF Cherry Creek Restoration
44	07-RPR-018	Cherry Valley Dairy Stream Enhancement
45	07-MPR-315	Cherry Valley Stream Restoration
46	07-HSR-029	Alpine Baldy Road Decommissioning - U.S. Forest Service Roads 6066 & 6067
47	07-MPR-323	French Creek Basin Feasibility Study, Fish Passage/Restoration
48	07-MPR-314	French Creek Basin Riparian Enhancement
49	07-NR-010	Japanese Gulch Fish Passage Improvements
50	07-ER-042	Assess and improve mainstem channel habitat connectivity
51	07-USR-039	Coho Creek Restoration
52	07-NR-011	Tank Farm Creosote Removal
53	07-USR-047	Jones Creek Restoration
54	07-MPR-313	Lower Snoqualmie Restoration - Duvall Reach Riparian Awareness
55	07-MPR-321	McElhoe-Person Levee Setback
56	07-MPR-322	Snoqualmie Riparian Restoration
57	07-HRA-011	Anthracite Creek Enhancement and Awareness
58	07-ER-037	Smith Island Estuary Restoration - Construction
59	07-MPR-300	Pilchuck River Assessment and Project Design
60	07-NR-008	Nearshore Sediment Nourishment Feasibility Study along Railroad
61	07-MPR-301	Tolt River Riparian Restoration & Invasive Removal (RM 3.7-4.2 & 4.95-5)
62	07-MPR-302	Stillwater Floodplain Restoration - Construction
63	07-MPR-318	Riley Slough Culvert Replacement Project
64	07-RPR-022	West Fork and Lower Woods Creek Restoration Partnership
65	07-NR-009	Light House Park Phase 2 Beach Restoration
66	07-MPR-325	Coe Clemmons Creek Restoration Phase 2
67	07-USR-046	Cemetery Creek Restoration Project
68	07-MPR-363	Middle Pilchuck Riparian Enhancement - Sor
69	07-ER-036	Qwuloolt Restoration - Phase III Construction
70	07-RPR-025	West Fork and Lower Woods Creek Habitat and Geomorphic Assessment
71	07-RSR-045	Riparian Restoration on farmland - Harris Creek
72	07-MSR-019	Trout Creek Road Erosion Control
73	07-HRA-029	Wetland Enhancement and Community Outreach ? North Bend

Map ID	HWS ID	Project Name
74	07-ER-039	Quilceda Estuary Restoration Hibulb Natural History Preserve
75	07-NR-014	Priest Point Pocket Estuary Restoration
76	07-RSR-051	Harris Creek Barrier Removal and Off-Channel Habitat Restoration
77	07-MPR-324	Raging River Tributary Fish Barrier Removal and Stream Habitat Restoration
78	07-ER-040	Steamboat Slough Tidal Marsh Enhancement
79	07-MPR-364	Middle Pilchuck Restoration - Hendrickson
80	07-MPR-330	Cherry Creek Equestrian Center Snoqualmie River Riparian Restoration
81	07-MPR-331	Full Circle Farm Snoqualmie River Riparian Restoration
82	07-MPR-332	Jubilee Farm Snoqualmie River Riparian Restoration
83	07-ER-053	Everett Riverfront North Wetland Complex
84	07-MPR-365	Fall City Park Riparian Restoraiton Phase 2
85	07-MPR-366	South Fork Skykomish Knotweed Control and Riparian Restoration
86	07-HRA-030	Upper Snoqualmie River Knotweed Control and Riparian Restoration